S. HRG. 100-296, PT. 2

DEPARTMENTS OF LABOR, HEALTH AND HUMAN SERVICES, EDUCATION AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1988

HEARINGS

BEFORE A

SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS UNITED STATES SENATE

ONE HUNDREDTH CONGRESS

FIRST SESSION

ON

H.R. 3058

AN ACT MAKING APPROPRIATIONS FOR THE DEPARTMENTS OF LABOR, HEALTH AND HUMAN SERVICES, AND EDUCATION, AND RELATED AGENCIES, FOR THE FISCAL YEAR ENDING SEPTEMBER 30, 1988, AND FOR OTHER PURPOSES

Part 2—(Pages 1-1223)

Department of Education

Department of Health and Human Services

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DEPARTMENTS OF LABOR, HEALTH AND HUMAN SERVICES, AND EDUCATION AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1988

TUESDAY, MARCH 10, 1987

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 9:40 a.m., in room SD–138, Dirksen Senate Office Building, Hon. Lawton Chiles (chairman) presiding.

Present: Senators Chiles and Weicker.

DEPARTMENT OF HEALTH AND HUMAN SERVICES

NATIONAL INSTITUTES OF HEALTH

STATEMENT OF DR. JAMES B. WYNGAARDEN, DIRECTOR

ACCOMPANIED BY:

VINCENT T. DeVITA, JR., DIRECTOR, NATIONAL CANCER INSTITUTE
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DORIS MERRITT, ACTING DIRECTOR, NATIONAL CENTER FOR NURSING RESEARCH

OPENING REMARKS

Senator CHILES. Good morning. This is the first of three sessions that we will have with the National Institutes of Health to review their funding and program proposals for fiscal year 1988.

A great turning point in history has occurred in this century. Just since the year of 1900 we have gained more than 25 years in the average life expectancy of Americans.

For the first time in human experience we have seen a complete unfolding of the full life cycle for a majority of people. Just 150 years ago in the United States, only 1 in every 3 newborn infants lived a full life. Today, 8 out of 10 newborn infants can be expected to achieve this.

Approximately 12 percent of the U.S. population is now over 65 years of age. In the coming decade the people who will survive past the age of 65 will double and the population of over 85 will more than triple in the coming decades.

This is a new factor in history. It amounts to a triumph of modern science, and is the cause of great national pride and celebration. Much of this progress is due, at least in part, to the work funded by the National Institutes of Health.

We hear about the problems of aging and the aging process. These problems, in fact, are due to diseases that someday will be cured. Instead of spending the last 15 to 20 years of our lives in pain and discomfort, someday most Americans, I believe, will enjoy full health for very nearly their entire life.

These triumphs do not suggest that there are not problems. While 8 of every 10 newborn infants live out a full life today in America, our infant mortality rate in this country is shamefully high.

We have made great progress in cancer research and now more than 50 percent of cancer victims survive. The incidence rate, however, of cancer in the age groups over 55 continues to rise.

The AIDS epidemic is all too well known and poses the prospect of a major health care catastrophe if a cure is not found. It is little comfort to learn that only 28 percent of the scientists polled by the New York Times believe that an effective cure for AIDS will be available even by the end of the century.

This morning is our NIH interview session with Dr. Wyngaarden. Each of the Institutes is represented here and the Directors of the National Center for Nursing Research, National Library of Medicine, the Division of Research Resources, all have their Directors here.

While all subjects and issues are open in this morning's session, we will attempt to focus on more specific Institute issues in the following two sessions this afternoon and tomorrow morning. There are a number of special budget issues that we need to discuss this morning.

These are the NIH proposal to carry forward $334 million of the 1987 funds into 1988. This proposal has resulted in more phone calls, letters, visits, and meetings so far this year than any other issue in the entire subcommittee.

Additionally, NIH has also proposed to forward fund all 1988 grant awards limiting the out-year annual increases to 1.3 percent with limited potential for some grants to increase 5 percent. These budget issues crosscut the entire agency and affect each institute and center, and there are these and other special crosscutting issues which will be the special focus of this morning's hearings.

We are delighted to have Senator Weicker who has been certainly a champion, interested in funding at NIH. We will call on him for an opening statement.

STATEMENT OF SENATOR WEICKER

Senator WEICKER. Thank you very much, Mr. Chairman.

Dr. Wyngaarden, it is always a pleasure to have you testify before the subcommittee.

Over the last few years, Congress has consistently supported increases in the NIH budget. As you know, I believe it essential that these increases continue as a reflection of our commitment to biomedical research and health care needs of the American people.

There is a lot of talk these days about cutting costs and controlling spending, but clearly cutting funds for biomedical research will not save any money. It will only result in an increase in health care costs today and in the outyears.

In fact, I am sure that if we doubled the $25 that we spend per person each year on biomedical research, we could cut in half the $2,000 this country spends per person each year in health care costs. Indeed, at a time when we debate catastrophic health insurance, it seems to me that concurrent with that ought to be a debate on what we do spend on biomedical research.

Indeed, maybe the fastest and the best way to cut back on our catastrophic illnesses is to put the money into research, or at least more moneys than are now allocated. I can assure you, the President's proposal to cut the 1987 NIH budget will not receive the support of this Senator. I will do everything I can to see that the 1988 budget builds upon the funding increases and scientific accomplishments we have been able to achieve over the past few years.

I might add, I think it is worth mentioning in passing even though the issue is no longer before us, that as you know we have now received a letter in response to Senator Chiles and myself from the Comptroller General of the United States. The portion of that letter that I think is worth mentioning very briefly is:

> * * * we found that contrary to the President's assurance that the funds in question be made available for obligation, the Department withheld, for approximately 2 months, $334 million of fiscal year 1987 budget authority.
>
> No report of this withholding was made. However, as we understand, you have been advised, NIH, pursuant to instructions from the Office of Management and Budget, plans to restore to grantees the funds that were cut, and to resume awarding new grants in a manner consistent with NIH's fiscal year 1987 appropriation.
>
> We conclude that NIH impounded the funds. The type of impoundment was a deferral. However, because of the recent ruling that section 1013 of the Impoundment Control Act is unconstitutional, the act no longer requires that reports of policy deferrals such as this be made.

In an important sense, the question whether this impoundment was required to be reported is secondary to the question of why it took place at all. The Department withheld the funds from obligation contrary to the President's intention that they not be withheld. Moreover, the President has continued voluntarily to report similar deferrals notwithstanding the ruling striking down section 1013.

It appears, therefore, that the Department was not authorized to defer the funds.

I just mention this in passing because it is nice to have the support now of the Comptroller General, but I would hope in the course of your testimony this morning you might indicate exactly what the NIH position was.

Certainly the position of this Senator and others was to go ahead and fight this matter if need be through the courts. You have the great opportunity, those of you in the National Institutes of Health, associated with education, science, and health in this Nation, you have the greatest opportunity of all of showing to the world what this Nation is all about and I would hope that you would neither let the difficulties of your task from a scientific point of view, nor the difficulties of the task from a political point of view, ever stand in your way.

Thank you very much.

PREPARED STATEMENT

Senator CHILES. Dr. Wyngaarden, we will put your statement in full in the record and you can submit your oral summary.

[The statement follows:]

STATEMENT OF JAMES B. WYNGAARDEN

Mr. Chairman, it is my privilege to present the President's budget proposal for the National Institutes of Health (NIH) for Fiscal Year 1988 and to report briefly on some of our activities and plans. In as much as this is my first appearance before the Subcommittee since you became its chairman, I will take this opportunity to assure you that we will do all within our power to provide you and your colleagues whatever information we may have that will be of use to the subcommittee in arriving at its important decisions.

We are nearing the mid point of a year-long observance of the centennial of the National Institutes of Health. A year ago, at our appropriation hearings, I gave a brief summary of our plans for centennial activities. I am pleased to report the high level of enthusiasm that has developed among many groups for holding special events and ceremonies to mark the 100th birthday of NIH. Between now and mid-October there is a full schedule of centennial events in Washington, as well as in many other parts of the Nation and overseas.

A consortium of leading pharmaceutical companies and the Howard Hughes Medical Institute is underwriting many of the expenses of the centennial observance, especially the four-part series of one-hour television programs being produced for airing by PBS next fall. The series, tentatively entitled "The Health Century," will tell the fascinating and significant story of the great progress that has been made in human health since the 1880s and the vital role played by biomedical research, notably the contributions made by each of the "partners in discovery," academia, industry and the NIH. We are confident that the centennial events and programs will create a better public understanding of the importance of biomedical research and will cause bright young people now making their career choices to consider the satisfaction and value of biomedical research.

During the past year the National Library of Medicine (NLM) also reached a significant milestone--its 150th birthday. The NLM continues to exercise worldwide leadership in scientific communication and is the central resource of our nation's biomedical information system.

Since we appeared before this Committee to discuss the budget estimates for FY 1987, the NIH has completed the establishment of a new institute, a new national center, and a major new position, all of which were authorized by the Health Research Extension Act of 1985 (P.L. 99-158).

The National Institute of Arthritis and Musculoskeletal and Skin Diseases was established officially April 8, 1986, and on January 16 of this year, Dr. Lawrence Shulman was appointed as the first director of the new institute. The National Center for Nursing Research was established April 18, last year. The programs of the NCNR will be directed primarily toward basic and applied research related to patient care, the promotion of health, the prevention of illness, and the understanding of individual family and community responses to acute and chronic illness and disability. Another important addition to the NIH organization is the establish-

ment of the Office for Disease Prevention, and the appointment of Dr. William Friedewald as an NIH Associate Director to head the new office. Dr. Friedewald, who has been at NIH for 20 years, is an outstanding scientist/administrator who will have a major role in promoting disease prevention programs within the NIH.

Mr. Chairman, the budget proposal for FY 1988 once again underlines the importance the NIH attaches to research on the acquired immunodeficiency syndrome (AIDS). The AIDS program at NIH supports basic, applied, preclinical, and clinical research with emphasis on natural history, pathogenesis, vaccine development and treatment. Research on the AIDS virus is the primary focus. A major accomplishment of the AIDS program during the past year was the identification of azidothymidine (AZT) and its early testing in patients with penumocystis carinii pneumonia.

The NIH has launched a new program of basic research in structural biology with emphasis on the development of antiviral substances, especially against the AIDS-causing virus. Our intramural scientists will use the methods of structural biology to characterize the AIDS virus at a molecular level in efforts to develop and modify targeted antiviral drugs. This program will complement similar efforts supported by NIH and planned for implementation at universities and other laboratories throughout the country. It is clear that a successful vaccine development program will depend upon a greatly expanded foundation of basic knowledge concerning the AIDS virus.

The FY 1988 request includes $343.5 million for AIDS research by all components of NIH, an increase of $91.0 million over the FY 1987 appropriation.

Molecular biology has progressed to the point where it is now possible to characterize the genetic material of man, in other words the whole human genome, by obtaining complete information on the location of particular genes as well as the order in which their 3 billion chemical building blocks (called nucleotides) appear. The possible benefits of characterizing the human genome are tantalizing. The new knowledge would greatly enhance our understanding of the molecular mechanisms that control gene expression and of the molecular basis of many inherited and "orphan" diseases. We could gain substantial information on cancer as well as on autoimmune and immune deficiency diseases. An extensive science base would be created of special importance to studies of toxicology and the effects of environmental contaminants; and we would hasten the day when physicians may be able to repair or replace defective genes.

Sentiment in the scientific community at this time favors approaching this massive project through a carefully planned stepwise effort rather than a mass attack. In preparation for further efforts on the project, we are developing collaborative arrangements with the scientific communities in Europe and Japan, and cooperating with other Federal agencies having interest.

The Administration proposes a long term policy of stable and sustainable support for the NIH. The President's budget seeks $5.8 billion in obligational authority in FY 1987 and 1988. The Administration also proposes a policy of appropriating the total NIH

allowance for research project grant commitments at the time that they are incurred.

The key adjustment proposed for FY 1987 by the administration is to extend the availability of $334 million of FY 1987 funds so that they could be obligated during FY 1988. The proposed carryover would be achieved by awarding 700 of the FY 1987 estimated 6,394 competing research project grants in FY 1988 rather than the current fiscal year, and by reducing the average cost of both competing and noncompeting awards in FY 1987. You may be assured, however, that we are now awarding grants in a manner consistent with the funding levels contained in the FY 1987 appropriation. Should Congress enact this proposal of extended availability, only those projects scheduled to receive awards subsequent to congressional action would have their grants reduced.

The revised budget for FY 1987, that would result from the proposed changes, would fund approximately 19,111 total research project grants, an increase of about 315 from the FY 1986 comparable level. All other NIH mechanisms would be funded in the same amounts as in the original FY 1987 appropriations. This includes funding for 560 centers, an increase of 23 over FY 1986, and 10,867 full-time research trainees, an increase of 485 over FY 1986. The funding for AIDS research, would not be affected by the Administration's proposal to revise the FY 1987 budget.

The President's budget request for FY 1988 includes $5,534 million in new budget authority. With the extended availability of $334 million in FY 1987 funds, the total obligational authority for 1988 would be $5,869 million, which is approximately equal to the level of the revised 1987 budget. The request would support 19,131 total research project grants, about the same number as in the proposal for the current year. New and competing renewal grants under the President's FY 1988 proposal would number 5,709 as compared with 5,654 in the revised 1987 budget, and 6,211 in 1986. The average cost per grant would be about the same as in 1987, $164,000 per award.

The 1988 request for research training, $233 million, would support approximately 10,867 trainees, the same number as in the revised 1987 level--approximately the number recommended by the National Academy of Sciences.

The number of research centers would be the same in 1988 as in 1987, but with a decrease in funding support of $1.4 million from FY '87 to the new figure of $522 million.

In the aggregate, the other NIH research mechanisms, such as other research grants, research contracts, the intramural research programs, research management and support, and disease control, would be maintained at approximately their FY 1987 comparable funding levels. Two exceptions are the Biomedical Research Support Grant (BRSG) and the Extramural Construction Program, both of which are proposed for elimination in 1988. Because of the continuing interest in investigator-initiated research project grants as the most appropriate form of support and the growing concern over budget constraints, the BRSG program and the Extramural Construction Program must rank as lower priorities when compared with other NIH programs.

As part of the President's biomedical research stability policy, the FY 1988 budget also includes a request for advanced appropriations in the amount of $2,726 million to support the outyear commitments (FY 1989 through 1994) generated by the award of competing research project grants during FY 1988. This approach to grant funding would focus attention on the total project and inform the research community of the total funds available for continuation costs. Provisions are made for modest annual increases of the average costs per grant. The funds for the noncompeting continuations would be awarded on an annual basis, as they are now.

I would be pleased to respond to questions about the budget or other matters pertaining to NIH.

BUDGET REQUEST FOR NIH

Dr. WYNGAARDEN. Thank you, Mr. Chairman. I appreciate your comments and those of Senator Weicker.

It is my privilege to present the President's budget proposal for the National Institutes of Health for fiscal 1988 and report briefly on some of our activities and plans.

This is my first appearance before the subcommittee since you became chairman. I want to assure you that NIH will do all within its power to provide you and your colleagues with whatever information we may have that will be of use to you and to the subcommittee in arriving at your important decisions.

NIH CENTENNIAL

We are nearing the midpoint of a year-long observance of the centennial of the NIH. I am pleased to report the high level of enthusiasm that has evolved among many groups who are holding special events and ceremonies to mark the 100th birthday of the NIH.

For example, a weekend ago we sponsored a 3-day program for science students and their teachers from each State, each territory, and the District of Columbia. There were several events in Washington and at the National Institutes of Health, including a luncheon at which 17 of our Nobel laureates were present; this was a marvelous ceremony enjoyed by everyone.

Between now and mid-October we are going to have a series of centennial events in Washington as well as in many other parts of the Nation and several overseas, where we have a large number of NIH alumni.

A consortium of leading pharmaceutical companies and the Howard Hughes Medical Institute have underwritten many of the expenses of these observances, especially a four-part series of 1 hour television programs being produced for airing on PBS next fall.

This series, entitled "The Health Century," will tell the story of progress made in human health since the 1880's and the vital role that biomedical research has played notably the contributions made by each of the partners in discovery—academia, industry, and NIH.

We hope that the centennial events and program will help create a better public understanding of the importance of biomedical research and the role of NIH, and also send out an appealing signal to young people who are now in the process of making career choices.

This past year the National Library of Medicine celebrated its 150th anniversary. The library's leadership throughout the world in scientific communication and biomedical information systems is well known.

SIGNIFICANT NEW EVENTS

Since last year, the NIH has completed the establishment of a new institute, a new national center, and a major new position, all authorized by the Health Research Extension Act of 1985. The National Institute of Arthritis and Musculoskeletal and Skin Diseases was officially established April 8, 1986; on January 16 of this year Dr. Lawrence Shulman was appointed its first Director. The National Center for Nursing Research was established on April 18 of last year. Another important addition, the Office of Disease Prevention and the appointment of Dr. William Friedewald as the Associate Director, took place earlier this year as well.

AIDS RESEARCH PROGRAM

Mr. Chairman, the budget proposal for 1988 once again underlines the importance the NIH attaches to research on the acquired immunodeficiency syndrome, or AIDS. Research on the AIDS virus and its effect on the immune system is a primary focus.

A major accomplishment of the AIDS program in the past year was the identification of azidothymidine, or AZT, and its early testing in AIDS patients with *Pneumocystis carinii* pneumonia.

The NIH has launched a new program of basic research in structural biology with emphasis on the development of antiviral substances, especially against the AIDS-causing virus. Our intramural scientists will use the methods of structural biology to characterize the AIDS virus at the molecular level in efforts to develop and modify targeted antiviral drugs. This program will complement similar efforts supported by NIH and planned for implementation at universities and other laboratories throughout the country.

It is clear that a successful vaccine development program will depend upon a greatly expanded foundation of basic scientific knowledge concerning the AIDS virus. The fiscal 1988 request includes $343.5 million for AIDS research by the components of NIH, an increase of $91 million over the 1987 appropriation.

GENE MAPPING

Molecular biology has progressed to the point that it is now possible to characterize the genetic material of man, in other words, the whole human genome, by obtaining complete information on the location of particular genes as well as the order in which their 3 billion chemical building blocks, or nucleotides, appear.

The possible benefits of characterizing the human genome are immense. This new knowledge will greatly enhance our understanding of the molecular mechanisms that control gene expression and the molecular basis of many inherited and orphan diseases. It will also provide substantial new information on cancer, autoimmune disease, immunodeficiency States, and inherited forms of mental illness. The science base will be especially important to studies in toxicology and the effect of environmental contaminants.

We have discussed the NIH approach to this potentially massive project; at present we favor a stepwise approach and have plans for beginning the first portions of our program during the next fiscal year. We are also expanding collaborative arrangements with scientific communities in Europe and Japan, and are cooperating with other Federal agencies having interest.

HIGHLIGHTS OF THE BUDGET REQUEST

The fiscal 1988 budget is designed to stabilize the level of NIH expenditures over the 1987–88 period. Included in the budget request for congressional approval are some changes in the fiscal 1987 appropriation, which, in combination with the request for next year, would result in stable funding at $5.8 billion for NIH for both 1987 and 1988.

As I have mentioned, a key component of the administration's proposal is to extend the availability of $334 million of fiscal 1987 funds for obligation in 1988. We had started to implement the administration's proposal earlier in the year. In response to several letters from the Congress we decided to terminate our initial response on March 3. Since that date we are once again awarding the fiscal 1987 budget in the manner that was originally intended by the Congress.

However, the proposed carryover is still in the budget proposal; if approved by the Congress, it would result in a decrease of about $118 million in the current fiscal year for competing research project grants, thus reducing their number by 700, and a further decrease of $216 million to lower the cost of both competing and noncompeting research project grants.

The President's budget request for fiscal 1988 includes $5,534 million in new budget authority. The 1988 request for training, $233 million, would support approximately 10,867 trainees, the same as in 1987, and approximately the number recommended by the National Academy of Sciences.

The number of research centers would be the same in 1988 as in 1987 but with a decrease in funding of $1.4 million from the 1987 figure to a new level of $522 million.

In the aggregate, the other NIH research mechanisms—such as other research grants, research contracts, the intramural research program, research management and support, and disease control—would be maintained at approximately the fiscal 1987 comparable funding levels. Two exceptions are the biomedical research support grant and extramural construction programs, both of which are proposed for elimination in 1988.

The fiscal 1988 budget also includes a request for advanced appropriations in the amount of $2.726 billion to support the out-year commitments from 1989 through 1994 of competing research project grant awards made during fiscal 1988. Provisions are made for modest annual increase of the average cost per grant. The funds for the noncompeting continuations would be awarded on an annual basis, as they are now.

Mr. Chairman, I will be pleased to respond to any questions that you and the committee may have about this budget or any other matters pertaining to the NIH.

EXTENDED AVAILABILITY PROPOSAL

Senator CHILES. Thank you. Dr. Wyngaarden, since I became chairman of the subcommittee, I have said no issues created more visits or phone calls than the proposal to carry over the $334 million by essentially proposing to extend the availability of the 5.5 percent of your 1987 funds to 1988.

We have heard from institutions all across the country, that 5 to 15 percent of their 1987 grant totals had been withheld. We went through the fact that we have written a letter to GAO.

My understanding is that you are not currently withholding these funds now?

Dr. WYNGAARDEN. That is correct.

Senator CHILES. We are delighted to hear that answer. I should add that GAO in response to a request from Senator Weicker and myself finds that practice to be one that would have typically been accompanied by a deferral proposal to Congress.

I know the proposal to defer these funds is still in effect and has not been withdrawn. It would cause a decrease of about 700 grants from the 1987 appropriated level.

Why don't you speak to this proposal and tell us what merit you believe that that has.

Dr. WYNGAARDEN. The proposal was introduced to contain the growth of out-year costs and to provide an essentially level budget for 1987 and 1988. This was a result of a discussion between the Department and OMB as to the amount of funds that would be made available for the NIH in 1988, in their judgment.

Senator CHILES. So, basically this proposal is driven by fiscal constraints as opposed to being NIH decisions?

Dr. WYNGAARDEN. Yes; that is correct.

ADVANCED APPROPRIATION

Senator CHILES. You are requesting $2.7 billion to fund the out-year cost of grants awarded in 1988 and this will hold the maximum annual increase of these grants to 1.3 percent compared to the more recent 15 percent annual increases. I understand that under this proposal the grants would be increased up to 5 percent if OMB approves the release of contingency funds.

This, of course, is an OMB proposal. What impact will it have on the NIH research efforts? How do you view it, and how does the research community view that?

Dr. WYNGAARDEN. The proposal would focus attention on a total project cost from the outset. There would be some advantages in the form of better fiscal planning and reducing uncertainties of out-year commitments.

It is admittedly rather difficult to be sure of the level of those out-year commitments. For example, in the first year of a new award, there are frequently nonrecurring costs, especially for equipment, so that the second year cost frequently does not increase.

After the second year, there tends to be a stepwise increase in the cost of the project as inflationary factors enter in. The study sections take all those factors into account in recommending an out-year budget for a specific research grant.

We have very little way of predicting what the out-year costs are going to be. We have a fairly good estimating mechanism for NIH as a whole. This works better in the aggregate than it does in the individual Institutes where sometimes factors that we cannot anticipate markedly alter the estimates of out-year costs.

I think the flexibility of going up to 5 percent if necessary would make it possible to amend awards when the costs were greater than anticipated at the beginning. But we have no way of absolutely knowing in advance whether the estimates of out-year costs that are provided in this proposal would actually approximate the true costs.

As you point out, the experience of recent years has been that the rate of increase has been greater than that estimate would allow.

AVERAGE COST INCREASES

Senator CHILES. Well, when NIH approves a grant which on an average is about 3.5 years duration, NIH and the institution have the so-called commitment or recommended levels for outyears which show increases from anywhere from 12 to 18 percent a year, well in excess of the CPI.

While these increases are subject to appropriations, there is a strong assumption or expectation that we will provide these appropriations. Is that in effect what OMB is getting at here? It does seem as if that takes the Congress a bit for granted.

Dr. WYNGAARDEN. Yes; I think that is a large part of it. There is concern about the growth of out-year costs of research grants.

Our experience has been that research project grants typically do run ahead of the inflationary spiral, and there are many reasons for that. The largest portion is driven by salaries, but there are also increases for equipment, and there are changes in the mix of types of grants.

For example, some of the centers in the AIDS program are funded as research grants that are five times as large as the average research grant. Such aberrations tilt the average cost per grant when they are factored in.

There are many other issues that affect the average cost of research grants. Our estimate for the out-year costs runs, as I said, a little ahead of the proposed figure.

AIDS RESEARCH

Senator CHILES. Doctor, last week we had Dr. Windom before the committee and discussed AIDS research. Of the $534 million requested in 1988 by the Public Health Service for AIDS research, $344 million, or 65 percent, is at NIH. While eight of your institutes are doing AIDS research, most of the work is done by the Institute of Allergy and Infectious Diseases; 13,000 new AIDS cases were reported last year, up 60 percent over 1985. With no breakthroughs, we'll have 270,000 in the United States with active AIDS illness within 5 years.

Do you believe we'll have an effective cure for AIDS before the end of the century? And where are we on drug development to treat AIDS?

Dr. WYNGAARDEN. Yes, Senator Chiles; I should mention, we have also at the table Dr. Fauci who is the AIDS coordinator at NIH; and I failed to introduce the Deputy Director, Dr. Raub, our Financial Manager, Mr. Mansfield, and Mr. Beldon, from the Department.

But with respect to the AIDS question, and Dr. Fauci may want to elaborate on this, given the fact that this disease has essentially been known for only 5 years, the rate of progress on it has been astounding.

Such progress could not have happened if AIDS had broken 10 or 15 years earlier. We were poised in 1982 because of prior work in retrovirology, for example, and immunology, to move very quickly into this new problem.

And the scientific community has responded with great vigor. There's been an astounding amount of progress for such a short time.

As you know, AZT is about to be released for general use. We have other compounds coming along that are also promising.

An extraordinary amount of work has been done on vaccine development, and several candidate vaccines have been tested in animals. It is now possible to recognize some protecting, neutralizing properties of these vaccines in their effect in tissue culture.

The next step, challenge of immunized animals, is likely to take place within weeks or months.

So on these two fronts, very promising work is underway. It's always dangerous to predict when one or another of these will genuinely result in a cure.

We do know that AZT is effective in reducing the rate of virus growth and the devastating effects of the disease in patients, but we don't have any evidence that it is a cure.

In part because we can't guarantee that the present programs in drug or vaccine development will succeed, we have launched a new program of fundamental research on the virus, of a structural biological nature. In the past few years, we have seen a great deal of progress in characterizing a few viruses by the very powerful new techniques of x-ray crystallography, that permit us to see the virus and all its little grooves

and mountains and valleys and pores and peaks. We can then design specific molecules that will fit in to specific areas of the virus as a sort of lock and key arrangement and block its ability to attach to cells, to penetrate cells, or to replicate.

We're now employing a similar strategy in the case of the AIDS virus. This approach in a way is a third level of attack.

FUTURE PROGRESS IN AIDS

In terms of where we are and how fast we can expect future progress, I'd like, with your permission, to ask Dr. Fauci if he'd like to comment.

Senator CHILES. Thank you. Dr. Fauci?

Dr. FAUCI. Mr. Chairman, the question often arises, as you have alluded to yourself, about whether we'll have a cure for AIDS, for example, within the next 10 years or by the end of the century.

Rather than think in terms of the more classic definition of cure, in the sense of completely eliminating the virus from the body, probably one of the more realistic approaches would be to try to suppress the replication of the virus to the point where either the immune system—the protective mechanisms of the body that are destroyed by the virus—can either regenerate itself, or we can, by artificial means, reconstitute the immune system.

The drug you've heard a lot about, azidothymidine, does not necessarily remove the virus in latently infected cells, or cells that are quiescently infected, but AZT can at least suppress viral replication enough to achieve some clinical improvement.

With regard to the activities of the NIH, we have a substantial effort in therapeutics. In 1987 we estimate expenditures of $102,791,000 on therapeutics, and our proposal in the 1988 President's budget is $148,750,000.

This is divided among several institutes, but is predominantly in the National Cancer Institute and the National Institute of Allergy and Infectious Diseases.

The strategy is to go from a developmental stage to develop drugs earl[illegible]on, either de novo, or to screen existing compounds and test them in NIH-funded treatment evaluation units.

I might add, Mr. Chairman, that the drug that has received the most publicity, AZT, was originally tested in the National Cancer Institute's intramural program. The Burroughs-Welcome drug has now been distributed to over 4,500 individuals over the past several months through an NIAID and NCI treatment distribution mechanism.

So there is a good deal of activity, ranging from the very basic development of drugs at the structural level, as alluded to by Dr. Wyngaarden, through screening up through and including drug testing in various phases.

Senator CHILES. So you think then our best opportunity is in these other areas of suppressing and reconstituting?

Dr. FAUCI. The two-pronged approach that we discussed again——

Senator CHILES. Can you give us your guess of any timeframe of what you see?

Dr. FAUCI. I think within the next couple of years we will probably have an agent that will be able to suppress the virus enough so that we can think in terms of not only immunological reconstitution but also substantial prolongation of life and comfort.

We've already seen that with AZT, and the first trial was measured only in months in a small number of people. The expanded trials we're talking about are in hundreds and hundreds of people, and, we hope, for a longer period of time. As newer drugs come along, they will perhaps be safer and more efficacious. The result will be years of suppression of the virus in AIDS patients. If you're talking about a cure with immunological reconstitution, a very rough guess would be probably 5 to 10 years, but it's very difficult to project those things.

Senator CHILES. We understand that.

ADDITIONAL AIDS FUNDING

Dr. Windom told us last week that on March 23 and 24 all the Public Health Service agencies will review and update their needs for AIDS funding. He has agreed to share the results of that review with us, as the committee very much wants to fund the full needs for the war on AIDS.

Will you let us know after that review what you consider to be the updated NIH needs as they relate to AIDS?

Dr. WYNGAARDEN. We will be glad to do that. If I could add one point for clarification, when we speak of bacterial diseases, we can effectively speak of cures in most cases, because the bacteria live in the tissues in the cells, but are not incorporated into the genetic material of the cells.

Thus, if one kills all the bacteria, one can speak of a permanent cure.

In the case of this particular viral disease, the viral genetic material gets into the gene of the cell and sits there, just like another gene. We have drugs that will suppress the replication of new viruses, but we need new strategies to get at the residual portion of the genetic material that has entered the genome of the cell of the human being.

The genetic material sits there forever, as far as we know, and there's a great deal that we need to learn about that process, called integration, and the subsequent expression of those latent genes. That's why this is a particularly difficult problem.

Senator CHILES. Senator Weicker?

ADVANCED APPROPRIATION

Senator WEICKER. Thank you very much, Mr. Chairman.

Dr. Wyngaarden, did your original budget request to the Public Health Service include a $2.7 billion advanced appropriation proposal to support grants in the outyears?

Dr. WYNGAARDEN. No, sir.

Senator WEICKER. Well, what I see here, very frankly, then, is stability in return for a cut in overall funding. Is that a succinct way to put it?

Dr. WYNGAARDEN. It is a way to predict more stably the out-year costs, yes, sir.

Senator WEICKER. It's a tradeoff, stability in return for a cut in overall funding.

IMPORTANCE OF BASIC RESEARCH

Now, I'd like to have your comments on something I've been trying to raise before the various individuals appearing before this subcommittee, and also raised to heighten the American public's consciousness of a very vital issue.

While the President's budget proposes to increase funding for AIDS research by $91 million, it also proposes to cut funding for basic biomedical research in 1987 and 1988 by a total of more than $600 million.

How important is basic research to all scientific efforts to better understand and develop cures and treatments for specific diseases? And wasn't it our investment in basic research—I think you already made that statement at the outset today—that resulted in our ability to identify the AIDS virus and move as quickly as we did toward applying our research efforts to the AIDS crisis?

Dr. WYNGAARDEN. I believe that the most important contribution that the NIH makes over the long run is to provide new basic knowledge that can then be more directly applied to the study of specific diseases.

Senator WEICKER. In other words, in your professional judgment, should we be increasing AIDS funding at the expense of all of our other research efforts?

Dr. WYNGAARDEN. I do agree with the high priority assigned to the AIDS problem. I have no disagreement with that.

The budget proposal was designed to delay the growth of the NIH budget in 1987, resulting in a level budget in 1988.

If, as you suggest, this proposal of extended availability is not accepted, we will indeed have a decrease in 1988.

Senator WEICKER. As I recall, the National Academy of Sciences report was very specific on this point, that new funding for AIDS should not be at the expense of other research efforts. Am I not correct on that point?

Dr. WYNGAARDEN. Yes; it's one of the first points the academy made.

IMPACT IF EXTENDED AVAILABILITY IS DENIED

Senator WEICKER. Now—and I want to make clear again, I want to make clear for the record that I think Dr. Wyngaarden has done an outstanding job in his leadership of the National Institutes of Health, and I think we all appreciate here that what we have before us, at least in dollar figures, was not something that was devised by you or your associates as much as it was devised by OMB.

But the fact is, whoever devised it, something is going to become national policy. And I have a feeling—I wouldn't mind the national policy in health as set by you and your associates, and I wouldn't mind it as being set by this committee and the Congress, but I very thoroughly object to it being set by the Office of Management and Budget.

Let me try to describe what's been done here, and then you can comment if you will.

Basically what has been done here, in the various proposals of the administration, would result in one of two of the following things happening.

Without delaying fiscal year 1987 money into 1988, the President only requests $5.5 billion in new budget authority. This is more than $600 million less than last year's appropriation signed into law by the President.

If Congress did delay $334 million from 1987, you would add $334 million—or $334 million would be added to the $5.5 billion fiscal year 1988 request and limit the large cuts, but the 1987 appropriations would be cut.

So let's see how that impacts. Assuming Congress doesn't agree to the President's request to cut 1987 funds to pay for 1988, the President's request for 1988 would cut the Cancer Institute $100 million; the Heart, Lung, and Blood Institute would be cut $100 million; the Institute for Dental Research would be cut $10 million; the Institute of Diabetes, Digestive and Kidney Diseases would be cut $70 million; the Institute of Neurological and Communicative Disorders and Stroke would be cut $67 million; General Medical Sciences would be cut $89 million; the Institute of Child Health and Human Development would be cut $45 million; the Eye Institute would be cut $32 million; the Institute of Environmental Health Sciences would be cut $11 million; the Institute on Aging would be $21 million; the Institute of Arthritis and Musculoskeletal and Skin Diseases would be cut $16 million; research resources cut $60 million; and the new Center for Nursing Research cut $3 million.

Is there anybody in this room who disagrees with those figures and the fact that if Congress doesn't agree with the President's request to cut 1987 funds to pay for 1988, this would be the result?

Dr. WYNGAARDEN. Our figures agree with yours, Senator.

IMPACT IF EXTENDED AVAILABILITY IS APPROVED

Senator WEICKER. Now, if Congress agrees to the President's cut, the following 1987 cuts would be made: $64 million from the Cancer Institute; $56 million from Heart, Lung, and Blood Institute; $6 million, dental research; $35 million Institute of Diabetes, Digestive and Kidney Diseases; $35 million, Institute of Neurological and Communicative Disorders and Stroke; $27 million for Institute of Allergy and Infectious Diseases; $45 million in General Medical Sciences; $23 million, Institute of Child Health and Human Development; $15 million from the Eye Institute; $6 million from Institute of Environmental Health Sci-

ences; $11 million from Institute on Aging; $9 million from Institute of Arthritis, Musculoskeletal and Skin Diseases; $1.4 million for the new National Center for Nursing Research.

Is that right?

Dr. WYNGAARDEN. Yes; that's correct.

Senator WEICKER. Well, there you have it. I don't think either of those policies is commensurate with the directions that at least Congress has been trying to take our scientific and medical endeavors.

And I think it's a little difficult for the lay person, certainly it's difficult for me—I have a staff that assists me on these things—to watch this shell game. A shell game.

That's exactly what it is. And I can assure OMB that there's no intention, at least on the part of this Senator, to allow these proposals to prevail, whichever direction they take, as described.

CLINICAL TRIALS

How many new clinical trials will you fund this year, and would any of those trials be cut if you delayed 1987 money into 1988? How many could you fund next year if you received your original 1988 request?

Dr. WYNGAARDEN. The adjustments that we've been discussing would be applied entirely to the research project grant category, so the number of clinical trials in 1987 would not be affected.

In 1988 we would be able to fund 12 major new clinical trials.

Senator WEICKER. I beg your pardon? How many would you run this year?

Dr. WYNGAARDEN. We plan to start 48 in 1987.

Senator WEICKER. And what would be the figure for next year?

Dr. WYNGAARDEN. We would be able to start 12 major new clinical trials in 1988.

Senator WEICKER. Well, last year, I asked for a list of clinical trials that should begin but wouldn't because of proposed budget cuts.

Would you again submit, for the record a list of those trials that should begin in fiscal year 1988 but won't if the President's budget is approved?

Dr. WYNGAARDEN. Yes, sir; we have that.

[The information follows:]

MAJOR NEW CLINICAL TRIALS READY TO BEGIN IN FISCAL YEAR 1988 IF FUNDS WERE AVAILABLE

	First year cost	Total projected cost
NATIONAL CANCER INSTITUTE		
Clinical trials of biological response modifers [BRM's], including studies of laminin fragments in patients with melanoma and breast cancer and of BRM's in the treatment of certain leukemias	$810,000	$810,000
Clinical trials of BRM's, including studies of II-1 and II-3 in cancer therapy	2,000,000	2,000,000
Expansion of Community Clinical Oncology Program (supports clinical trials in community hospital setting)	6,000,000	12,000,000

MAJOR NEW CLINICAL TRIALS READY TO BEGIN IN FISCAL YEAR 1988 IF FUNDS WERE AVAILABLE—Continued

	First year cost	Total projected cost
NATIONAL CANCER INSTITUTE—Continued		
Additional chemoprevention trials to identify intermediate endpoints for prediction of later reduction in cancer rates	$1,400,000	$2,800,000
Women's health trial: Expansion of level of effort supported by request to optimal pace	7,100,000	.....
Clinical cooperative group trials, including additional breast cancer studies, leukemia research, and treatment of brain tumors	3,020,000	9,390,000
Use of tumor necrosis factor and chemotherapy in the treatment of breast cancer	250,000	750,000
Cancer centers (additional support would allow for increased core support for clinical trial research)	6,000,000	12,000,000
Lung cancer prevention in tin miners	500,000	5,000,000
Total, National Cancer Institute	27,080,000	44,750,000
NATIONAL HEART, LUNG, AND BLOOD INSTITUTE		
Treatment of pulmonary embolism	1,000,000	10,000,000
Cholesterol lowering in older men and women	2,000,000	58,000,000
Membrane-active agents to prevent sickle cell disease	500,000	3,000,000
Therapy in patients with peripheral arterial disease	1,000,000	54,500,000
Pharmacologic intervention in adult respiratory distress syndrome	750,000	20,000,000
Alcohol restriction in treatment for hypertension	295,000	3,530,000
Treatment of idiopathic fibrotic lung disease	1,000,000	30,000,000
Digitalis and congestive heart failure	200,000	6,500,000
Continuous positive airway pressure for treatment of sleep apnea	800,000	4,000,000
Total, National Heart, Lung, and Blood Institute	7,545,000	189,530,000
NATIONAL INSTITUTE OF DENTAL RESEARCH		
Diabetes control and complications trial—Ancillary study on periodontal complications	280,000	1,400,000
Evaluation of the anticaries effectiveness of a dentifrice with a less-than-traditional fluoride concentration among preschool age children	300,000	900,000
Evaluation of pit-and-fissure sealants to treat small caries lesions	150,000	300,000
Total, National Institute of Dental Research	730,000	2,600,000
NATIONAL INSTITUTE OF DIABETES AND DIGESTIVE AND KIDNEY DISEASES		
Effects of antihypertensive agents on the progression of kidney disease due to diabetes mellitus, including their use in people with normal blood pressures	2,500,000	35,500,000
Erythropoietin therapy in the treatment of anemia in people with end-stage renal disease	1,500,000	24,500,000
Diagnostic and treatment strategies in interstitial cystitis	750,000	9,500,000
Use of antisecretory agents in the treatment of chronic secretory diarrheal disorders	1,250,000	6,500,000
Diet and exercise in the prevention and treatment of noninsulin-dependent diabetes mellitus	2,500,000	35,500,000
Pharmacologic prevention of cholesterol gallstones during rapid weight loss	1,250,000	6,500,000

MAJOR NEW CLINICAL TRIALS READY TO BEGIN IN FISCAL YEAR 1988 IF FUNDS WERE AVAILABLE—Continued

	First year cost	Total projected cost
NATIONAL INSTITUTE OF DIABETES AND DIGESTIVE AND KIDNEY DISEASES—Continued		
Growth hormone releasing factor therapy versus growth hormone therapy in children with growth hormone deficiency	$1,500,000	$7,500,000
Optimization of kidney transplant outcomes in children with end-stage renal disease	750,000	6,500,000
Total, National Institute of Diabetes and Digestive and Kidney Diseases	12,000,000	132,000,000
NATIONAL INSTITUTE OF NEUROLOGICAL AND COMMUNICATIVE DISORDERS AND STROKE		
Study of Cyclosporin A for the management of autoimmune disorders such as multiple sclerosis, myasthenia gravis, and Guillian-Barre syndrome	525,000	1,600,000
Study of calcium blocking agent for the treatment of acute spinal cord injury	500,000	1,575,000
Study of copolymer I in the treatment of multiple sclerosis	1,000,000	3,000,000
Development of vaccine for treatment of otitis media	2,145,000	6,645,000
Efficacy trial of a new antiepileptic drug in patients with complex seizures	500,000	1,000,000
Study of heparinoids for the treatment of stroke (prevention of blood clots)	2,145,000	11,145,000
Total, National Institute of Neurological and Communicative Disorders and Stroke	6,815,000	24,965,000
NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASES		
Enhancement of bone marrow transplantation therapy	2,640,000	19,800,000
Antigamete malarial vaccine for P. falciparum and P. vivax	100,000	200,000
Role of fish oil dietary supplementation in treatment of asthma	235,000	1,030,000
Immunoglobulin therapy for respiratory syncytial virus infections	500,000	1,500,000
Efficacy of polyethylene-glycol conjugates of allergy extracts in treatment of allergies	235,000	755,000
Treatment of condyloma acuminata with biological response modifiers	350,000	1,750,000
Clinical trial with different regimens of therapy for condidemia	215,000	641,000
Efficacy trial for live, attenuated hepatitis A virus vaccine	230,000	1,300,000
Total, National Institute of Allergy and Infectious Diseases	4,505,000	26,976,000
NATIONAL INSTITUTE OF CHILD HEALTH AND HUMAN DEVELOPMENT		
Clinical trial of hemophilus influenzae vaccine	500,000	1,500,000
Evaluation of low dose aspirin therapy in the prevention of preeclampsia	1,000,000	2,500,000
Therapeutic antibiotic trial to delay birth and perinatal morbidity in mothers with preterm premature rupture of fetal membranes	1,000,000	3,500,000
Evaluation of vitamin E in the prevention of intraventricular hemorrhage in very low birth weight infants	1,500,000	3,500,000
Intravenous Ig globulin in the prevention of neonatal infectious morbidity in very low birth weight infants	500,000	1,250,000
Transdermal patches for female contraception	250,000	500,000

MAJOR NEW CLINICAL TRIALS READY TO BEGIN IN FISCAL YEAR 1988 IF FUNDS WERE AVAILABLE—Continued

	First year cost	Total projected cost
NATIONAL INSTITUTE OF CHILD HEALTH AND HUMAN DEVELOPMENT—Continued		
Mental retardation research centers network of clinical trials	$1,200,000	$6,000,000
Clinical studies with new injectables for female fertility regulation	200,000	750,000
Clinical study of a new testosterone derivative for male fertility regulation	175,000	400,000
Clinical studies with a new generation of LHRH antagonists for male and female fertility regulation	350,000	1,200,000
Clinical studies with a long-acting spermicidal formulation	150,000	350,000
Induction of ovulation in postpartum lactating women with pulsatile, intravenous gonadotropin-releasing hormone	200,000	600,000
Dose response relationship between thyroxine dose and lower leg growth rate in childhood hypothyroidism	200,000	600,000
Nutrition, other factors, and the outcome of pregnancy	150,000	600,000
Factors influencing breastfeeding	150,000	600,000
Total, National Institute of Child Health and Human Development	7,525,000	23,850,000
NATIONAL EYE INSTITUTE		
Assessment of acyclovir and other antiviral agents in the treatment of ocular herpes infections	2,000,000	10,000,000
Treatment of CMV retinitis with antiviral drugs	4,100,000	21,000,000
Assessment of anticlotting agents in the treatment of retinal vascular occlusions	1,500,000	9,000,000
Assessment of laser treatment of macular edema in central vein occlusion	1,000,000	7,000,000
Study of effects of various types of contact lenses on the cornea at the cellular level	450,000	2,500,000
Comparison of early versus late intraocular surgery for accident victims who have suffered ocular trauma	1,000,000	5,000,000
Total, National Eye Institute	10,050,000	54,500,000
NATIONAL INSTITUTE OF ARTHRITIS, AND MUSCULOSKELETAL AND SKIN DISEASES		
Efficacy of calcitonin in the treatment of osteoporosis	500,000	2,500,000
Use of 13-cis retinoic acid and other retinoid derivatives in treating keratinizing disorders	1,000,000	3,000,000
Total, National Institute of Arthritis and Musculoskeletal and Skin Dosorders	1,500,000	5,500,000
Total, National Institutes of Health	77,750,000	504,671,000

RESEARCH FACILITIES

Senator WEICKER. There was one question here. Last year you testified that facilities that are out of date and in poor repair interfere with both the quantity and quality of research that can be done, and contribute to increased risk to the safety of investigators.

Yet you have eliminated all funding for extramural laboratory construction and renovation.

I believe, if I'm not mistaken, in last year's budget, we went along

with your argument and provided renewed emphasis on this issue because of your request.

Now why have you proposed eliminating all of these funds in 1988?

Dr. WYNGAARDEN. The 1987 appropriation contains $9 million for extramural construction; those programs are proposed for elimination as part of the fiscal constraints of the times.

Senator WEICKER. Are we saving money in the long run if we allow our laboratory facilities to fall into disrepair?

Dr. WYNGAARDEN. I agree there is a need, but we're not sure just how great it is. A study is going on right now in collaboration with the National Science Foundation to estimate more precisely just what the need is for more construction in the research community at large.

Senator WEICKER. But you didn't have that study in hand last year when you made what was a very impassioned plea on this point. I don't think things have changed—I don't think we need a study to tell us that things have changed.

This is another one of these budgetary considerations, is that right?

Dr. WYNGAARDEN. Yes; there's no question a very large need exists.

Senator WEICKER. Well, the only point I'd make before I'd yield back to the chairman is, one thing that you and all of your colleagues have requested of me over the years is that there be some consistency in whatever it is we do, that we don't go through these peaks and valleys, that that is rather discouraging to any of the varied efforts that you're engaged in.

Don't you think that same rule should apply to your request to me and to the chairman? In other words, there should be some consistency if indeed you get us going down one track one year, then it's a little difficult for us to fathom why you're coming back the next year and say, hey, stop everything.

Dr. WYNGAARDEN. That approach was, of course, one of the major points of the stabilization proposal developed under Secretary Califano and Dr. Fredrickson some years ago. I think that point is still very valid, yes, sir.

Senator WEICKER. Well, again, I realize the difficulties under which you labor. But I don't think any moneys would be saved in this particular regard over the long haul.

I yield to the chairman.

COMMERCIALIZATION OF BIOTECHNOLOGY RESEARCH

Senator CHILES. Thank you, sir.

Doctor, I know the National Institutes of Health have been instrumental in developing the basic science needed to genetically engineer new organisms, and out of that basic research has emerged the exciting new field of biotechnology.

Given the strong basic research programs at our Nation's research universities, what's needed to enhance, to encourage, to promote, or otherwise move that research results from the laboratories through development to the commercial product stage?

It's clear that the NIH's research and training programs have provided the foundations for the development of this country's growing biotechnology industry.

Some have felt that our biotechnology has not grown fast enough. We see other nations, Japan and Germany, for example, reaping the benefits of our basic research. What can NIH do to further advance and stimulate our biotech industry, and do we need some major national facilities designed and developed specifically for the purpose of enhancing the technology transfer into the biotechnology field?

Dr. WYNGAARDEN. The biotechnology industry is, of course, growing very rapidly. And, as you imply, the NIH has made a very large contribution to that growth over the years.

In fact, it was the emphasis in the 1950's and 1960's on basic research in immunology and primarily genetics that led to the techniques that now undergird this industry, particularly those of recombinant DNA research.

And that emphasis arose, Mr. Chairman, because the Congress and the scientists felt that we needed to make a very large investment in undifferentiated science at that time.

Many of the discoveries at that early stage came from the study of genetics in bacteria and viruses.

Now the techniques that we consider part of biotechnology—that is, the production of new substances or new molecules in living organisms by programming the cells—undergirds all aspects of science.

It started out as a fundamental science endeavor, and now it's everyday research.

The NIH commitment to that research is very large. In 1987, for example, we have about $720 million directed toward research that we can clearly identify as biotechnology research.

Senator CHILES. That's really not the thrust of my question. I agree with that.

The question is, what are we doing, and can we do more, and do we not have to do more to transfer that research and to get it into the commercial field?

I think we've done an outstanding job. What is perplexing is to see other countries reap the benefits of this tremendous commitment that we've made and our resources to do the basic research, because it takes us so long in making that transfer into actual products.

There's got to be something—we've got to move faster than that.

Dr. WYNGAARDEN. I certainly can't argue with the thrust of your statement. But there is a very rapid transfer of new techniques into the commercial sector.

Many of the biotech firms are doing very good research of their own.

Senator CHILES. Again, I think there's a very rapid transfer. The problem is, most of it isn't ours.

Dr. WYNGAARDEN. We're still ahead, but you're right that we're being pressed very hard.

Senator CHILES. We're ahead. But if you look at the rate of growth, you know, we were ahead in the semiconductor industry. We were ahead in many of these areas. And we now see ourselves behind overall in a negative balance of trade in a high tech period. About a $2 billion negative balance now after we've led the world for—it was our field.

TRANSFER OF RESEARCH RESULTS

The same thing is going to happen in this biotech unless we do something better. And I'm asking you, how can you help us? What should we be doing? Are there things that we should be doing to try to facilitate that faster transfer?

Dr. WYNGAARDEN. I think that the best way we can stay ahead is by maintaining a very strong emphasis on fundamental research, and then making sure that those discoveries are patented and licensed to American companies.

That is going on. We have a great many such patents that are being developed and commercialized. The rate of licensing of NIH-sponsored patents is really very high.

Some of them are, as you say, outside the United States. Whenever the work is being done in this country and can be patented here, it certainly ought to be, and licensed here.

Senator CHILES. Your answer is we just need to keep on doing what we are doing, but that's not good enough. When you look and see—maybe it is not your department. Maybe I am talking to the wrong group. We have got to develop something that allows us to go faster and to keep more of this.

You said what we are patenting. That's good, and what we are licensing, but much of it we are simply publishing and it is available and someone else picks it up. So I would like for you and your shop to look at, not to denigrate anything else you are doing, but what else can we do in trying to provide this transfer? Is there some other midpoint mechanism that we need to set up to facilitate that? Because if we look and see what is developing out there, it is very clear that we are the ones that are spending the bucks, and it is hard dollars for us. We think it is dollars that we should invest, but other countries are not even making that spending. They are simply taking off from us and then beating us to the market. We've got to have a better way to do that. Part of it is protecting our processes, but a lot of it is simply getting in the field, capturing the market and getting in place before they can. That means we have to think about other ways that we can move forward.

Dr. WYNGAARDEN. I might mention that we have looked at this issue. Two meetings of the Director's Advisory Committee have addressed this topic. One was directed specifically toward biotechnology; a more recent one was concerned with the human genome. The fundamental question put to the advisory panel of experts that we convened was this: Should the NIH be doing anything more, or should we be doing anything different?

Representatives of the large industries and also the smaller biotech firms were present at the biotechnology meeting. I think the dominant message that they sent us was perhaps epitomized by the statement of Ted Cooper from Upjohn, former Assistant Secretary of Health and former director of one of our institutes. His statement was, "Let NIH be NIH." In his opinion, the best thing we could do is to emphasize the development of fundamental knowledge in this field that can then be picked up and utilized by American industry.

We examined many subsets of that issue. One question, for example, had to do with emphasis on generic applied research as it is called, or process research. Here we had some division of opinion. The larger companies urged us to stay out of that area because from their standpoint the ability to patent the process was just as important as patenting the product.

Smaller companies disagreed with that viewpoint, stating they couldn't afford heavy investments in process development; they urged the NIH to do somewhat more in regard to process engineering.

As a consequence of that meeting, we joined with the National Science Foundation in the partial support of a biotechnology center at MIT, funding the biological side of some of the Bioengineering Training Program.

With respect to the human genome question, which clearly has major implications for American industry as well as health sciences, we identified four stages of development at four levels of problems. The first had to do with information handling. Even without any acceleration in the rate of effort in this field, we are falling behind in handling the information that is being developed. So that is the first item that needs to be tackled.

The second had to do with better methods, promotion of development of rare cutters, for example, at statistically less frequent points in the genetic structure; better purification procedures; better separation and identification procedures; and improved methods of determining the sequences. Robotics enters into that.

The third had to do with the development of the gene map, and the fourth the rate at which the problem of sequencing is addressed. The first two of those are very much related to the biotechnology question.

So we have examined this issue, and I think the results of both conferences have prompted some responses on the part of NIH. We are very much aware of this issue. But I think, as you suggest, that many of the problems faced by the biotech industry are ones that we can't ourselves address within our own mission.

DEMONSTRATION PROJECT

Senator CHILES. Dr. Wyngaarden, as you know, I am particularly interested in the Florida demonstration project for federally sponsored research, the State of Florida and nine other State schools plus the University of Miami are spending and working under a standardized research agreement to delegate and simplify the number of administrative

tasks associated with Federal dollars for research. That project is an outgrowth of the work of the National Science Foundation. It began some 3 years ago. The project is also sponsored by the National Academy of Sciences and the university industry research roundtable.

NIH is one of the five Federal agencies participating in that project, and I want to thank you for your initiative. I am interested in what you see as the potential of the Florida project?

Dr. WYNGAARDEN. We are very enthusiastic about that project. Both Dr. Raub and I sit on the government university industrial roundtable of the academy, and Dr. Raub has represented the NIH in all the negotiations and developments. I would like, with your permission, to ask him to respond to that question.

Senator CHILES. Dr. Raub.

Dr. RAUB. There is a good deal of optimism that the early returns, which are almost uniformly positive, can be consolidated into a consensus among the participating agencies and institutions that will set the stage for some recommendations leading to improvements and simplifications in some of the policies that affect research grants overall.

Senator CHILES. As you know, I wrote Jim Miller last year when the committee was considering language to delay the administration's efforts to change OMB Circular 21 and cap certain administrative costs for sponsored research, and I invited OMB to take a look at what the agencies in the State of Florida were doing as a possible alternative.

I am hopeful by expanding the concepts that we are demonstrating in that project the Government could engage in a partnership with the university community that not only would enhance research productivity, but would actually reduce indirect cost. It ought to be one of those situations where everybody kind of wins. The paperwork will be reduced, the indirect cost will be reduced, and we'll have better research.

Would you agree with that?

Dr. RAUB. The principal drive on the part of all the participants is, as you said, the hope of developing a stronger pattern of working together, as well as the expectation that some reductions in the costs may result.

It is too early to determine whether we will be able to document in great detail some savings that will show up in the indirect cost pool. But everybody close to the project is confident that there will be savings, if only savings in the form of allowing scientists in the laboratory to spend more time conducting research.

Senator CHILES. Absolutely, and not paperwork. My Governmental Affairs subcommittee is going to hold a hearing on this subject on April 14, probably in Florida, and we hope to hear from the chancellor and several of the university presidents, as well as from faculty. We want to also make sure we hear from agencies involved, and I want to take this opportunity to personally invite you or your representatives to attend and testify. My intention is to try to make this hearing some kind of a workshop to see where we should go next, how we can go forward with this.

Senator Weicker, do you have any other questions?

APPORTIONMENT POLICY

Senator WEICKER. Just a couple more. Dr. Wyngaarden, Congress has consistently recognized the need for NIH to retain a certain amount of flexibility over its budget so new research priorities and needs can be addressed quickly and responsibly.

Report language accompanied the Senate appropriations bill last year which stated, and I quote:

> The committee expects the OMB to refrain from apportioning funds to NIH by mechanism and number of awards. The OMB should apportion funds to NIH based on quarterly allotment of appropriated funds without further specification.

What is the status of OMB's apportionment policy? In other words, setting aside the proposal to delay 1987 money into 1988, has OMB apportioned NIH funds any way other than on a quarterly basis?

Dr. WYNGAARDEN. NIH funds are apportioned this year as last, on a quarterly basis and by a mechanism rather than by total institute appropriation as prior to 1985.

We have had some discussions with OMB. When Mr. Kleinberg visited us at NIH, we raised this point, stressing the increase in administrative complexity. He said he would be willing to consider modifications of the present apportionment plan. We have officially requested that we go back to the system in use prior to 1985, but we haven't had a reply as yet.

Senator WEICKER. Did you say that the time had come for OMB to visit with you up there at NIH and discuss this matter?

Dr. WYNGAARDEN. Mr. Kleinberg did visit with us some months ago, and when we raised the apportionment as one of the items to discuss, he expressed a willingness to consider a modification. We sent a letter to him requesting that we go back to the former system, as also advocated in the report language.

Senator WEICKER. Who is this gentleman?

Dr. WYNGAARDEN. He is from OMB.

Senator WEICKER. Could you identify him?

Dr. WYNGAARDEN. Mr. Kleinberg.

Senator WEICKER. And he is the OMB representative that deals with NIH?

Dr. WYNGAARDEN. Maybe Mr. Mansfield can tell us.

Mr. MANSFIELD. He heads the division that is responsible for NIH.

Senator WEICKER. He heads up the division that is responsible for NIH. This really brings me to my last question because I keep on asking it and I have yet to get a response. Does either Mr. Kleinberg or any of the persons in his division, are they of medical or scientific background do you know? Can anybody respond to that question?

Dr. WYNGAARDEN. No, sir; we don't think so.

Senator WEICKER. Don't you find this a little strange in terms of a budget policy, an area as highly technical as yours, that there shouldn't be somebody representing the Office of Management and Budget or

within their team that has knowledge somewhat comparable in a general sense to yours? Isn't it a little difficult to talk, in other words, in that situation?

Dr. WYNGAARDEN. The President's science adviser provides some scientific guidance for OMB. I don't know whether he has spoken to this particular issue, but that is one of the functions of his office.

Senator WEICKER. Not just this issue. I mean, isn't it rather frustrating for you and your various directors to sit down there and try to make sense of a specific subject when you are talking to those that have absolutely no knowledge at all and are just interested in achieving a bottom line dollar figure?

Dr. WYNGAARDEN. We had a good conversation with Mr. Kleinberg that day.

QUESTIONS SUBMITTED BY THE SUBCOMMITTEE

Senator WEICKER. I have no further questions. I have further questions for submission.

Senator CHILES. I think we both have further questions for the record, and we will submit those for the record.

[The following questions were not asked at the hearing but were submitted to be answered for the record:]

Questions Submitted by the Subcommittee

PROFESSIONAL JUDGMENT BUDGETS

Question. Dr. Wyngaarden, by law the National Cancer Institute must submit a "Bypass Budget" to the President. It bypasses the Secretary and OMB, and this year it is for $1.7 billion, $300 million more than the official request. Each of the other Institutes prepares professional judgment budgets, and this year each of them is $100 to $200 million more than the official request.

In total, the NIH professional judgment budgets and the NCI bypass budget would require in excess of $2 billion over the President's official request.

I would like you to review for the Committee these professional judgment budgets. Are there situations where the Subcommittee should be considering increases over the President's request?

Answer. First, it is important to note that the FY 1988 professional judgment budgets to which you have referred were developed by the individual NIH components as the first step in the formal FY 1988 budget process. These budgets were prepared in April 1986 and were therefore based on the FY 1987 President's Budget of $5.1 billion. At the time of preparation, the professional judgment budgets did not include funding for AIDS research.

The FY 1988 President's Budget that was prepared in December 1986 and submitted to the Congress in January 1987 is based on a revised FY 1987 appropriation of $5.8 billion. Funding for AIDS research is included.

After adjusting for the AIDS program and the inclusion of the National Center for Nursing Research, the difference between the FY 1988 professional judgment budgets and the President's Budget is $1.7 billion.

The FY 1988 President's Budget for NIH will support a strong program in biomedical research, assuring that the highest quality science will be funded. In their professional judgment budgets, however, the Institutes have identified many areas in which additional resources could be wisely invested if funding were available.

Question. Please submit to the Committee an Institute-by-Institute list comparing the President's Budget with the professional judgment budgets, with a short narrative in each case as to what of significance would be funded by the increase.

Answer. The following list compares the FY 1988 President's Budget with the Institutes' professional judgment budgets (adjusted to include AIDS). The narratives describe the programs that could be undertaken with the increases shown in the listing.

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	President's Budget	Professional Judgment Budget	Increase
NCI.....	$1,366,935	$1,770,892	$403,957
NHLBI.....	878,490	1,107,868	229,378
NIDR.....	113,602	142,428	28,826
NIDDK.....	475,891	591,056	115,165
NINCDS.....	458,204	615,761	157,557
NIAID...	577,594	642,928	65,334
NIGMS.....	526,860	666,102	139,242
NICHD.....	345,436	451,934	106,498
NEI.....	200,020	255,108	55,088
NIEHS.....	204,690	237,736	33,046
NIA.....	167,164	212,016	44,852
NIAMS.....	132,089	185,370	53,281
DRR.....	263,324	443,519	180,195
NCNR.....	17,598	22,643	5,045
FIC.....	11,566	19,367	7,801
NLM.....	64,399	84,852	20,453
OD.....	59,819	57,409	---
B&F.....	5,000	60,890	55,890
Undistributed Mgmt. Fund.....	---	20,910	---
Total.....	5,868,681	7,588,789	1,701,608

National Cancer Institute

The NCI would expand its highest priority, which is basic research, and, from its successes, pursue the steps needed to apply this knowledge in cancer prevention, control, treatment, and detection. One such scientific area that would be exploited is research on autocrine motility factor (AMF), a newly discovered protein factor produced in large quantities by highly aggressive tumor cells and which appears to play a significant role in stimulating tumor cell invasion, the process that eventually results in the death of the patient. Researchers might soon be able to make a monoclonal antibody to AMF, thus preventing its ability to promote tumor cell invasion.

Studies of genetic mechanisms involved in cancer would also be given increased support. For example, new efforts would be initiated to search for possible "suppressor genes" involved in neoplastic transformation. Recent evidence suggests that inactivation of these genes, which appear to suppress the action of oncogenes, may be critical to the cancer process.

Additional support would be given to NCI's programs geared toward prevention and control. These programs are meant to link the results of basic, epidemiological, and clinical research to direct health practice and care. Efforts oriented toward research to validate preventive regimens, as well as to improve public and professional knowledge about cancer and cancer control, would be expanded.

Efforts to identify new inhibitors for carcinogenesis in dietary components would be intensified, as would studies on the mechanism

by which dietary components may function as promoters of mammary cancer development. Current investigations of specific micronutrients, as well as macronutrients such as fat, would be expanded.

Additional approaches would be pursued to identify individuals who may be at increased risk for the development of cancer. Among the most promising are the evaluation of inherited genetic abnormalities in families with high incidence of cancer, as well as evaluation of genetic changes at the molecular level in similar families.

Increased support would be given to studies involving adoptive immunotherapy, the adjuvant therapy involving administration of Interleukin-2 and Lymphokine-Activated Killer cells from the patient's own immune system. This therapy has already proven effective in several previously resistant advanced cancers, including kidney cancer and malignant melanoma. Additional support would allow further testing against other kinds of cancer, and further research focusing on administration of the therapy to increase its potency and reduce side effects.

New emphasis would be accorded studies of adjuvant therapies--the use of drugs, hormones, or biological agents in combination with a definitive local treatment such as surgery or radiation therapy. Recent evidence has demonstrated that adjuvant therapies are capable of improving survival from several common solid tumors, including those of the breast, colon, rectum, and bladder.

National Heart, Lung, and Blood Institute

Because of their high priority, additional clinical trials would be funded by NHLBI in such areas as: the treatment of pulmonary embolism; lowering cholesterol levels in older men and women; the use of membrane-active agents to prevent sickle cell disease; therapy in patients with peripheral arterial disease; pharmacologic intervention in adult respiratory distress syndrome; alcohol restriction in treatment for hypertension; treatment of idiopathic fibrotic lung disease; digitalis and congestive heart failure; and continuous positive airway pressure for treatment of sleep apnea.

A new NHLBI initiative, Programs of Excellence in Molecular Biology, would be funded. These multidisciplinary research units would integrate molecular biology technologies with cardiovascular and pulmonary research.

Other initiatives would include: the study of hyperglycemia as a risk factor for cardiovascular disease to investigate the relationship between abnormal glucose tolerance and cardiovascular disease; research focusing on the molecular, cellular, and genetic mechanisms that govern the events responsible for vascular healing; and efforts to stimulate research, development, and evaluation of new and improved therapies for the management of iron overload in patients with Cooley's anemia.

The NHLBI would expand its research career program for additional preventive pulmonary academic awards and minority school faculty development awards, and would implement a new education program designed to increase blood donations, increase the efficient use of blood, and improve the safety of the Nation's blood supply.

Other NHLBI priorities include studies of the effects of dietary cholesterol on plasma cholesterol and lipoprotein levels; a program to stimulate research designed to expand our knowledge of the molecular biology and biochemistry of airway mucins and regulation of airway mucin biosynthesis in health and disease; and research on molecular approaches to understanding collagen gene expression in pulmonary fibrosis.

National Institute of Dental Research

The NIDR would expand research manpower development to enlarge the pool of basic and clinical research investigators needed in the years ahead. A second major priority concerns the Institute's desire to build upon its already established intramural strength in fields such as microbiology and immunology, oral medicine, and developmental biology and anomalies. The broad-based questions pursued by NIDR scientists have been critical in expanding the scope of dental research with important implications for biomedicine in general and certain clinical conditions in particular.

The NIDR has also highlighted a need to stimulate interdisciplinary and multidisciplinary approaches to research on oral health in aging--addressing questions of chronic pain, nutrition in relation to oral and general health, and the development of oral health promotion and disease preventive measures appropriate to older Americans. New initiatives involving the development and testing of better restorative materials would also be undertaken.

The Institute would expand epidemiological studies and clinical trials in keeping with the emphasis the NIDR is now placing on the identification of individuals, of any age, who are at high risk for oral disease, and evaluating new preventive measures or treatments.

Finally, the NIDR would expand support of quality research, especially in new or under-funded areas such as tissue regeneration, implants, oral viral-bacterial interactions, mapping the tooth genome, and behavioral and social science research.

National Institute of Diabetes and Digestive and Kidney Diseases

Research efforts would be intensified on the genetic basis of susceptibility to juvenile-onset diabetes. Research would be stimulated on islet cell transplantation. Additional impetus would also be given to research to follow up on recent remarkable advances in the search for the gene for cystic fibrosis.

The NIDDK would augment its major new initiative to combat kidney disease of diabetes, one of the most devastating complications of this disease. Plans for an expanded initiative would encompass research and public education and would include clinical studies on the use of antihypertensive agents in treatment. The NIDDK would enhance its research effort on the urinary tract, emphasizing such diseases as benign prostatic hyperplasia and interstitial cystitis.

The Institute would capitalize on important research opportunities that have resulted from the discoveries of hormones found in both the brain and the gut, improving our understanding of the rela-

tionships between human behavior and eating--so important in dealing with diseases like peptic ulcer and with obesity, a key risk factor for many serious diseases. The NIDDK would also accelerate its plan to mount new efforts on the prevention of obesity.

High priority would be given to funding clinical trials in such critical areas as erythropoietin therapy for anemia in end-stage renal disease, diet and exercise in adult-onset diabetes, treatment of chronic secretory diarrheal disorders, and pharmacologic prevention of cholesterol gallstones.

Finally, the Institute would increase training and research career development opportunities for talented investigators.

National Institute of Neurological and Communicative Disorders and Stroke

The NINCDS would support studies on the molecular basis of the selective vulnerability of the brain or of specific neurones in the brain to toxins and degenerative processes (such as Parkinson's disease, amyotrophic lateral sclerosis, and multiple sclerosis) to provide new approaches to therapy and/or prevention of these disorders.

A particularly high priority would be the funding of clinical trials in the following areas: development of a vaccine for the treatment of otitis media; use of heparinoids in the treatment of stroke (prevention of blood clots); treating acute spinal cord injury with a calcium blocking agent; the efficacy of promising new antiepileptic drugs in patients with complex seizures; and the use of Cyclosporin A for the management of autoimmune disorders.

The Institute would expand its basic research on nerve regenerative processes and the effect of neuronal tissue implants on brain function; emphasize further development of recombinant DNA techniques to facilitate the identification of a genetic marker for Alzheimer's disease; and support research on pain and sensory mechanisms dealing with anatomy and physiology, especially of opioid receptors and peptides.

New neurophysiological techniques and theories would be applied to the study of speech disorders such as stuttering, dysarthria, and verbal dyspraxia. The NINCDS would also support neural prosthesis design and development of software and hardware for rapid evaluation of many different speech processing schemes in the same patients with auditory prostheses.

Another priority would be the expansion of techniques of molecular genetics and immmunology to study the fundamental processes in degenerative disease, neurotransmitter regulation, tumor growth and targeting of cytotoxins to tumor cells, as well as regulatory neuronal differentiation and plasticity.

National Institute of Allergy and Infectious Diseases

Within the broad category of immunology and immunologic diseases, the Institute would support investigations of immuno-

logical tolerance of B-lymphocytes important in furthering knowledge about autoimmunity and, thus, about approaches to therapy. Studies would be expanded on the possibility of dietary intervention (e.g., fish-oil enriched diets) for inflammatory diseases such as asthma.

A new Asthma and Allergic Diseases Center would be devoted to the study of adverse drug reactions that are a significant cause of both morbidity and mortality in this country, and a new Center for Interdisciplinary Research on Immunologic Diseases (CIRID) would focus on immunologic mechanisms of neurologic and endocrinologic disorders. A core outreach demonstration component would be added in each CIRID for the transfer of technology related to basic and clinical immunology.

The NIAID would undertake organ transplantion activities related to preparation and analysis of monoclonal antibodies against histocompatibility antigens and against tissue specific antigens, and would support program project grants in transplantation immunology to facilitate the application of basic studies to clinical organ transplantation.

Major eforts would be directed toward vaccine development, including the development of candidate vaccines against pertussis, rabies, gonorrhea, syphilis, Group A streptococcal infections, Pseudomonas aeruginosa infections in cystic fibrosis patients, cholera, respiratory syncytial and parainfluenza viruses, and Rocky Mountain spotted fever, as well as polysaccharide bacterial vaccines.

In the area of sexually transmitted diseases (STD), expanded investigations would be supported in chlamydia infections to explore newer technologies leading to development of candidate chlamydial vaccines. Also receiving emphasis would be studies on genital warts to characterize the immune responses to viral proteins to identify antigens for potential vaccine development. Training programs in clinical and fundamental STD research would be expanded to increase the cadre of trained and motivated clinical and basic STD research investigators.

National Institute of General Medical Sciences

The NIGMS would increase support in its most promising area of research: gene mapping, structural biology, and biotechnology. For example, recent advances and promising developments in gene mapping techniques indicate that great potential lies ahead for more rapid mapping of the human genome. More complete specification of the chromosomal locations of particular normal and disease genes, combined with further research on the complex regulatory processes involved in activating and deactivating genes, would contribute greatly to our understanding of the etiology of many diseases, both those caused by a single gene defect and those complex diseases, such as hypertension, that have a genetic component.

Fundamental research into the three-dimensional structure of proteins and nucleic acids, coupled with explorations about how the details of such structure govern the function(s) of these molecules, is a field burgeoning with opportunity. By applying sophisticated new technologies that employ computers in combination with x-ray

crystallography and nuclear magnetic resonance (NMR) spectroscopy, scientists can now unlock these structure-function mysteries in an effort, ultimately, to custom-design more effective therapeutic drugs by exploiting these structural properties.

Developing new methods and tools for fundamental research in molecular biology, genetics, structural biology, and pharmacology will continue to yield technologies--such as diagnostic probes, artificial enzymes, and custom-designed vaccines and drugs--useful in medicine as well as in agriculture and industry. Maximizing both the development of these advanced methodologies and their application will require a large cadre of highly skilled, new talent developed in research training settings of the highest quality.

National Institute of Child Health and Human Development

The Institute would give high priority to its Low Birth Weight Initiative, allowing the networks of maternal-fetal medicine units and neonatal intensive care units to initiate new clinical trials on the use of medications to prevent pregnancy-induced hypertension and treat maternal diseases; the safety and efficacy of therapeutic agents to stop premature labor; prevention of infection and intracranial bleeding in very low birth weight infants; and optimal management of premature rupture of the amniotic membranes.

As a companion effort to the recent establishment of two centers focusing on the problem of intrauterine growth retardation, two new center grants would be awarded to address the prevention of premature labor and delivery. These efforts would be complemented by epidemiological studies on ethnic differences in the rate of low birth weight and causal factors relating to pregnancy and poor pregnancy outcome among lower socioeconomic status inner city minority populations, with special emphasis on teenage pregnancy.

The Institute would expand its Contraceptive Development Initiative through research in the areas of immunocontraception; interference with gamete maturation; the development of contraceptive approaches based on new reproductive peptide hormones; and behavioral studies on early childbearing.

In its Program in Vaccine Development, the NICHD would accelerate the pace of clinical trials in Massachusetts and Sweden of the new pertussis vaccine, and would initiate large clinical trials sufficient to permit licensing of the NICHD *Hemophilus influenzae* conjugate vaccine to confirm efficacy and safety in infants. This latter vaccine has the potential to eliminate a major cause of mental retardation and mortality in infants.

Also in the field of mental retardation research, the Institute would initiate planned cooperative clinical trials in the mental retardation research centers, and would accelerate efforts to map the genes on chromosome 21 that are responsible for Down syndrome.

The Institute would also expand its research on childhood injury prevention and would provide additional Physician Scientist Award grants to develop investigators in obstetrics and pediatrics.

National Eye Institute

The NEI would initiate several new clinical trials, including: assessment of acyclovir and other antiviral agents in the treatment of ocular herpes infections; treatment of CMV retinitis with antiviral drugs; assessment of anticlotting agents in the treatment of retinal vascular occlusions; assessment of laser treatment of macular edema in central vein occlusion; evaluation of the effects of various types of contact lenses on the cornea at the cellular level; and a comparison of early verses late intraocular surgery for accident victims who have suffered ocular trauma.

A new program of clinical vision research development grants would be initiated. These development grants are intended to increase the number of vision centers capable of planning and carrying out epidemiological studies and other clinical research related to disorders of the eye and vision.

Other research initiatives would include: application of molecular genetic techniques to unsolved problems of vision research, which would include finding the gene that codes for the enzyme aldose reductase and learning how to interfere with its function, learning what genes play a role in ocular melanoma, and exploring the genetic basis of the hereditary retinal degenerations; immunological research on uveitis, corneal graft rejection, and other eye conditions believed to have an immune basis; research on age-related macular degeneration to discover its causes and to find more effective treatments; studies on the biochemistry of cataract to find a nonsurgical method of treating the disorder; studies to improve detection and treatment of glaucoma with particular emphasis on detecting early damage to the optic nerve; and research on improved methods of screening for and treating childhood visual disorders including research to improve the treatment of amblyopia, a common condition in which the vision of one eye is lost because of disuse in early childhood.

National Institute of Environmental Health Sciences

The Institute would expand ongoing studies of molecular and cellular mechanisms of environmental injury, reproductive and developmental effects of chemical exposure, studies of immunological and host defense mechanisms, dose and species extrapolation, and the acid rain phenomenon. In addition, the NIEHS would devote more attention to new areas of interest such as molecular biology and biotechnology.

In its research and testing program, the Institute would begin testing approximately 20 chemicals nominated and approved for study to evaluate their harmful effects including the potential for causing cancer. Using rat and mouse models to characterize toxic and tumor responses, NIEHS researchers would evaluate the effects of chemicals known to cause cancer in humans.

Ongoing initiatives would be expanded in such areas as oncogene cloning and sequencing, related molecular modeling, and molecular dosimetry pattern evaluation for polycyclic aromatic hydrocarbons, and the support services related to the biometry

and risk assessment program. The NIEHS would also support the incorporation of biochemical technology into quantitative risk assessment and a new research effort in radiation and risk assessment.

Finally, the Institute would expand in-house activities related to examination of possible cellular alterations in the blood brain barrier and would initiate new research on possible neurotoxic effects resulting from exposure to antiviral agents as indicated by changes in higher order cognitive function and seizure susceptibility.

National Institute on Aging

The NIA would substantially increase its activities in Alzheimer's disease research and would initiate new projects focused on the isolation of Alzheimer's disease genes. International comparative studies of Alzheimer's disease would also be initiated.

The NIA would expand its program in molecular genetics research and in osteoporosis research, as well as research on falls and hip fractures.

In the area of prevention, the Institute would support increased research in a high priority area--nutrition and aging. Other areas targeted for expansion include the aging immune system and additional support for research resources, especially colonies of aging animals. The important longitudinal studies of Established Populations for Epidemiologic Studies of the Elderly (EPESE) would be expanded, and longitudinal components on old and very old persons would be added to the National Center for Health Statistics' National Health and Nutrition Examination Survey (NHANES).

The extramural research career and research training programs would be increased to aid in reaching goals established by the DHHS Report on Training in Geriatrics and Gerontology. In addition, the Institute would increase the number of intramural research training positions.

National Institute of Arthritis and Musculoskeletal and Skin Diseases

Special research initiatives would be undertaken or expanded in the general areas of infectious etiology of early arthritis, molecular biology of rheumatic diseases, osteoarthritis, osteoporosis, basic muscle biology, sports medicine, and low-back pain.

The Institute places a high priority on improving extramural biomedical research instrumentation, and would therefore enhance its efforts in this area.

New core centers in skin diseases research would be initiated, and a comprehensive arthritis and musculoskeletal diseases center would be added.

Data systems in arthritis would be expanded, and similar systems in musculoskeletal and skin diseases would be established.

The Institute would implement major new clinical trials in such areas as connective tissue diseases; the efficacy of treatment of esophageal strictures associated with epidermolysis bullosa with pheyntoin (dilantin); and the efficacy of 13-cis retinoic acid in treating keratinizing disorders.

Special studies on detection of and risk factors in osteoporosis would be conducted, and a special epidemiologic study of rheumatic diseases in the United States would be supported.

In the NIAMS Intramural Research Program, basic and clinical studies in arthritis and muscle biology would be strengthened; the Orthopaedic Research Branch would be staffed and equipped, and a new Laboratory of Research in Molecular Biology established.

Division of Research Resources

The DRR would support its General Clinical Research Centers Program at council recommended levels, and would fund approximately 12 new centers in the Biomedical Research Technology Program to address the need for advanced instrumentation and up-to-date technologies for research investigators. Special emphasis would be directed toward expanded biological applications of nuclear magnetic resonance, intermediate-voltage electron microscopy for cellular and molecular biology, and increased access to supercomputer centers.

In the Laboratory Animal Sciences and Primate Research Program, the Division would complete necessary repairs and renovations at the primate centers, initiate several new laboratory animal diagnostic laboratories, expand the Animal Facilities Improvement program, and initiate an Animal Facilities Construction Program to relieve overcrowding, accommodate changing research requirements, and replace outmoded facilities. This construction program would require construction authority.

In the Biomedical Research Support Program, the Division would restore the BRS formula grant program, expand the Shared Instrumentation Grant Program, and provide maintenance and repair costs for instruments awarded through the program.

Several new awards would be made in the Minority Biomedical Research Support Program, and the Undergraduate College Initiative and the animal facility improvement program at MBRS institutions would be expanded.

National Center for Nursing Research

The NCNR would expand its efforts in three priority areas: acute and chronic illness; health promotion and disease prevention; and nursing systems and special projects.

Additionally, emphasis would continue in the area of career development, through a variety of mechanisms and across program lines, to invest in training, preparing, and supporting investigators of the future. This thrust would broaden the base of well-trained research faculty in colleges of nursing, assure the availability of qualified faculty in excellent academic nursing centers, and help alleviate the nursing shortage.

Fogarty International Center

The FIC would expand its International Fellowship Program to include awards for basic and clinical research in biomedical disciplines related to AIDS. The awards would be made to and administered by domestic institutions with demonstrated expertise in AIDS research and would support both U.S. and foreign scientists.

A second year of fellowship support would be provided to recipients of the International Research Fellowship Award (IRF). This additional period of support would provide awardees more time to organize, conduct, and complete their research projects.

Several projects to improve international cooperation in biomedical research would be undertaken: bilateral science and technology initiatives with Thailand, Brazil, and Czechoslovakia; health scientist exchange programs with China, Mexico, and Chile; new projects on medical entomology research and training in Southeast Asia; and research strengthening through international collaboration in the region of the Americas.

FIC would also undertaken new international studies in hepatic carcinoma, measles, and international mobility of scientists.

National Library of Medicine

The NLM would expand efforts in medical informatics to design and build new, advanced biotechnology information systems for use by investigators nationwide. The vast amount of new knowledge emanating from the scientific community can best be put to use with new computer-based systems and better integration of existing ones.

Another NLM priority would be the expansion and acceleration of the initiative to develop a Unified Medical Language System (UMLS). The UMLS project addresses a fundamental problem: the present inability of different computer-based information systems to "talk" to one another.

The Integrated Academic Information Management System (IAIMS) program would be advanced to phase III, the implementation of prototype systems. These model IAIMS prototypes will transform the various information bases of a complex medical institution into an integrated system.

The NLM would enhance its Medical Informatics extramural research program, initiate four comprehensive Centers of Excellence, and expand the current investigator-initiated research grant program. This important and developing multidisciplinary field involves the integration of computer and information sciences, medicine, engineering, and management science.

Additional initiatives would include efforts to bring to our nation's medical and health-related libraries the benefits of the latest information science technology; develop means for NLM MEDLARS users to attach to any of the numerous existing relevant databases at NLM and elsewhere; and begin a nationwide program, coordinated by the NLM, to preserve the biomedical literature outside the NLM collection.

Buildings and Facilities

The following priorities would be undertaken: completion of the 10th year of the Clinical Center modernization program, including renovation of three patient care units and an intensive care unit; continuation of the laboratory renovation program, including the construction of Building 5 and design of Building 2; the installation of two additional 3,000-ton chillers in Buildings 34A and 11 to accommodate the added loads from Buildings 6A, 8, 8A, 12 and some additional load from the new AAALAC facilities; begin construction of the support facilities for the NICHD/Neurosciences/Primate Facility, including parking garage, expansion of Building 6B, the Building 30 addition, and design of a chiller; and inflationary allowances for the repair and improvement program.

BIOTECHNOLOGY

Question. I know the NIH has been instrumental in developing the basic science needed to genetically engineer new organisms. Out of that basic research has emerged the exciting new field of biotechnology. Could you briefly outline the role the NIH has played in creating this new technology and fostering its development, and outline the potential of biotechnology in the health, agricultural and chemical manufacturing fields?

Answer. The Office of Technology Assessment in its publication, Commercial Biotechnology, has defined biotechnology as "any technique that uses living organisms (or parts of organisms) to make or modify products, to improve plants or animals, or to develop microorganisms for specific uses." While biological processes have been used by man for hundreds of years to make wine, beer, cheeses, and yogurt, the new biotechnology is an outgrowth of the remarkable achievements of basic research studies largely supported by NIH. These studies led to the development of recombinant DNA technology or so-called "genetic engineering," as well as the technology to produce monoclonal antibodies. These techniques make it possible to isolate desired fragments of genetic material from normal and disease states, and to manipulate specific genes, permitting improved diagnosis and treatment of a number of diseases.

NIH supports such research in two categories: basic research directly related to or utilizing the new biotechnology, and a broader science base of research that underlies biotechnology. In FY 1986, NIH provided a total of almost $2 billion for the support of activities related to the new biotechnology. Of this, about $700 million was for research directly related to biotechnology while about $1.3 billion was for the more broadly based research.

Biotechnological advances have been occurring extremely rapidly, from work being performed both at universities and medical schools and at many large and small industrial firms throughout the country. This intense activity is leading to applications in fields as diverse as medicine, agriculture, mining, and solid waste management. It is estimated that the market for medically related products produced by biotechnology may be $23 billion by the year 2000. Sales of newly developed agricultural products may be as high as $100 billion by that time. While plant genetics and hybrid development have a long

history, the new molecular genetics uses techniques that can reduce the need for the trial and error approach and generally speed the development of crops with higher yields, greater disease resistance, and wider geographic use. Animal husbandry is also a great potential beneficiary of improved breeding techniques, as well as cheaper and more effective disease prevention. Commercial developments in chemical manufacturing, particularly in the synthesis of new chemicals, and large scale production of rare proteins, such as enzymes and hormones, are also based on biotechnology. All these new industrial developments have arisen as a result of the basic research supported by NIH.

In addition, NIH has played a substantial role in training researchers in the fields related to biotechnology. Both in its own intramural program and through its research training grant and fellowship programs at universities, NIH has prepared new talent for this burgeoning field. For example, about 1,500 predoctoral trainees and 1,000 postdoctorals at universities currently receive support for research training in areas related to biotechnology.

Question. Do we have any programs or funding to encourage collaboration between our universities and industry to accomplish the whole task from basic science to the application of products in the U.S. marketplace?

Answer. NIH encourages collaboration between universities and industry in a number of ways:

- First is the NIH patent policy, which promotes the transfer to and commercialization of federally funded inventions by the private sector. The process whereby the inventions that result from NIH-supported research are reported, evaluated, and submitted for patenting is an interactive one. It involves the Patent Branch of the Department's Office of the General Counsel and the individual NIH bureaus, institutes, and divisions. The invention reports from individual grantees at universities are evaluated for their potential for commercial use. This evaluation is made by experts who determine the feasibility of the invention's operational use, its novelty and scientific importance, and its potential commercial marketability. These assessments are the basis for NIH recommendations as to whether a patent should be sought. If patenting of the invention is recommended, the application process is initiated in the Patent Branch. Since 1953, the NIH patent program has been responsible for the assessment of more than 3,500 inventions funded in whole or in part by the DHHS. Patent applications have been filed for nearly 40% of these inventions, and patents have been awarded to more than 27%.

- Second, many young scientists who have received NIH-supported research training are now doing research and developing commercial products at industrial firms, including small new biotechnology companies and large chemical and pharmaceutical manufacturers throughout the country.

- o With the encouragment of university administrations and NIH, faculty members have established professional relationships with industrial concerns serving as consultants and advisors.

- o Through the Small Business Innovation Research Grants Program, NIH supports development and applied research at a large number of biotechnology firms. The investigators at these firms often have close, continuing associations with, and indeed may serve on, the faculties of neighboring universities.

- o Intramural scientists, working in NIH's own laboratories, are now able to consult with industrial concerns, thus permitting their knowledge and discoveries to be translated more rapidly into the manufacture of products. Safeguards are in place, however, to preclude conflict-of-interest situations.

Question. Is this another area of basic research where we will spend millions of dollars to unlock the basic scientific secrets, only to let foreign interests take the results of the basic research and do the commercial development?

Answer. It is important to recognize, but not overstate, the concern that industrial firms abroad may reap the benefits of the U.S. investment in basic research that has spawned the biotechnology industry. I share the belief of Mr. Ronald Cape, President of Cetus Corporation, that worries of this nature are really premature because the biotechnology industry is still years from maturity. Mr. Cape and I agree that the future of biotechnology is still very much dependent upon the results of basic research studies of the kind supported by the NIH, and that support for such research should continue to have a high priority.

100th ANNIVERSARY - STIMULATING AN INTEREST IN YOUNG PEOPLE IN SCIENCE AND HEALTH

Question. I was pleased to see that NIH is using the opportunity of its 100th anniversary to educate the public about the benefits of NIH basic research, and to stimulate the interest of young people in biomedical research careers so this program can continue during the next 100 years. What do you think should be done in our elementary and secondary schools to stimulate this interest?

Answer. As you have noted, one of the major objectives of the NIH Centennial Observance is to stimulate the interest of young people in biomedical research careers. I believe we all recognize that America's leadership in biomedical research will quickly diminish without the continued infusion of bright, curious young minds. Further, we recognize that teachers inspire scientific excellence. Keeping these two facts in mind, the NIH sponsored an NIH Centennial Scholars and Teachers Program. The governor of each state and the five U.S. territories and the Mayor of the District of Columbia each selected a high school student who had demonstrated scientific aptitude and scholastic achievement. Each student named the teacher who most influenced his or her interest in science. The

Centennial Scholars and Teachers were brought to Washington, D.C., for a 3-day program (February 28-March 3, 1987), which included lunch and a reception with Nobel laureates associated with the NIH, a breakfast on Capitol Hill hosted by Senator Kennedy, visits with their congressional representatives, visits to NIH biomedical research facilities, and briefings with many of NIH's outstanding researchers. In addition, each student received a small scholarship. The response from the scholars and the teachers has been overwhelming.

In addition, an integrated education program is being developed, using as the basis a Public Broadcasting System (PBS) film series on advances in biomedical research over the past 100 years; the series is scheduled for airing in October 1987. The education program will be distributed to high schools. Our objective is to include quality educational materials in school curricula, while incorporating a motivational dimension encouraging young people to consider biomedical research careers. We hope some of these educational materials can be adapted to the elementary school level.

We believe that these two special initiatives, occasioned by the NIH Centennial, will go a long way to stimulate the interest of young people in biomedical research careers.

ANIMALS IN RESEARCH

Question. Dr. Wyngaarden, your Deputy, Dr. Raub, has told us that he spends more time on the animals-in-research controversy than any other issue, and we hear about the controversy here on the Committee. Give me your opinion on the rules in use for animals in research, and when will NIH meet the accreditation standards?

Answer. The present Public Health Service Policy on Humane Care and Use of Laboratory Animals (PHS Policy) embodies carefully developed and widely recognized standards to ensure appropriate care and use of animals in research and reflects as well the statutory requirements of P.L. 99-158 (The Health Research Extension Act of 1985) and the Animal Welfare Act as amended (P.L. 99-198). The standards are those originally developed and recently updated in 1985 by a committee of the National Academy of Sciences (The Institute of Laboratory Animals Resources [ILAR] of the National Research Council) and published as the Guide for the Care and Use of Laboratory Animals (The Guide). PHS Policy requires organizations to follow The Guide and to comply with the statutes.

The statutory requirements and the recommendations of The Guide represent a broad consensus of scientific and public views on laboratory animal welfare. The NIH intramural research programs are currently in compliance with the statutory requirements and PHS Policy.

Accordingly, NIH believes that it is important to plan to qualify for the independent accreditation of the American Association for Accreditation of Laboratory Animal Care (AAALAC), which is a determination by recognized expert nongovernmental authorities that an organization meets the established standards in all its research facilities and programs. Many NIH components already have obtained

AAALAC accreditation. However, renovation and construction of facilities are required to achieve AAALAC accreditation for all NIH facilities and programs. NIH plans to meet AAALAC accreditation standards by late 1988.

Question. Last year the Committee provided $13 million for the upgrading of NIH's animal facilities in order to meet the AAALAC standards. Will this amount be adequate to meet accreditation standards?

Answer. The NIH has set a goal of ensuring that all animal facilities on the NIH campus are accreditable by October 1987. By that date, all the identified construction projects (Buildings 6B, 7, 10A, 14D, 14D Aux., 36 Mezz., 110A) will be under way. Completion of all these projects is expected by December 1988. These projects represent the short-term activities that need to be undertaken to meet the standards. The need for greater consolidation and improvement of animal space is recognized but will require a longer time frame and further construction. A major part of this need will be addressed by the NICHD/Neurosciences/Primate Facility and associated plans.

FUNDING FOR SCIENTIFICALLY APPROVED GRANTS

Question. Dr. Wyngaarden, in FY 1987 Congress appropriated enough funds to support 6,200 new grants. This would still only fund approximately 3 out of 10 scientifically approved grants. Does NIH have a goal of increasing the percentage of NIH funded scientifically approved grants?

Answer. In light of the expanding number of research opportunities before us, our goal would be to award 45 to 50% of all approved research project grants. This would ensure that a significant portion of potentially valuable science would receive support.

BUDGET CUTS

Question. All we hear about is the need to increase NIH funding. Hopefully we do not have our head in the sand regarding budget deficit targets. Where is the one place at the NIH that you would propose a cut?

Answer. The FY 1988 request proposes several reductions to the NIH budget: the elimination of the Biomedical Research Support Grant program and the extramural construction program; and downward negotiations from full study section recommended levels of support for research project grants of 17% for noncompeting awards and 18% for competing awards. These would be the largest decreases from the full costs of grants ever to be made by NIH. Other than the reductions already included in the FY 1988 request, I do not believe there are any other areas where I could propose a budget cut.

STATUS OF UNITED STATES RESEARCH FACILITIES

Question. Dr. Wyngaarden, it has been estimated that there is a $2-$4 billion need across the Nation to build or renovate our research facilities. How do you feel about this?

Answer. As is indicated by the breadth of the $2-$4 billion estimate of need for facilities, we do not yet know much about the nature and the distribution of the need for research facilities support. NIH is engaged with the National Science Foundation in a forthcoming comprehensive survey that should clarify the issues. Only when the results of the survey are known will we be in a position to develop an estimate concerning our research facility needs.

Question. What problems do we have in the area of instruments and equipment?

Answer. In FY 1987, Congress provided approximately $16.0 million for the small instrumentation grant program, a new initiative developed in response to the findings of an instrumentation survey funded jointly by the National Science Foundation and the NIH. This survey identified many problem areas concerning obsolete or poorly maintained equipment; however, the most significant need cited in the survey was for relatively low-cost pieces of equipment in the price range of $5,000 to $60,000. The FY 1988 request includes continued support for this program.

A BALANCED RESEARCH PROGRAM

Question. Dr. Wyngaarden, with so much emphasis being placed on grants, are you taking care of the other important programs like training and clinical trials? (A balanced research program is essential.)

Answer. While the support of investigator-initiated research is indeed our highest priority, we have made every effort to maintain a balanced program of research activities. In its FY 1987 appropriations to the Institutes, Congress provided funds to ensure a strong, well-balanced program of biomedical research. In the mechanisms other than research project grants, the FY 1987 revised estimate and the FY 1988 request maintain the levels of support that were provided in the FY 1987 appropriations.

BUILDINGS AND FACILITIES

Question. The NIH has been hoping to consolidate onto the Bethesda campus its personnel located in off-campus rental space. How is this effort proceeding?

Answer. The NIH has considered two alternatives to the continuation of its current off-campus leases: the Federal construction of a consolidated office building on the NIH campus, and the lease-purchase of such a building. The General Services Administration has the authority to negotiate lease-purchase arrangements on Federal land, but has begun to use this authority only recently. Two pilot projects, both outside the Washington area, have been approved and are in the initial stages of development. Discussions are in progress to determine the applicability of this authority to the NIH proposal. A concept design for the building has been selected, and the environmental impact of the new building is being assessed inclusive of traffic flow, parking, and existing and potential modes of travel for employees to the new site.

The NIH has compared in detail the costs of the lease-purchase alternative to those resulting from the continuation of the off-campus leases. The comparison shows that, in the first year of occupancy of the new building, savings of $2.3 million would be obtained with the on-campus alternative becoming continually more favorable each year. Over a 20-year period it would cost about $66 million less, at the end of which the Government will own the building. Present value analysis, as prescribed by OMB Circular A-104, shows lease-purchase to be the most favorable of the three possible alternatives:

a.	Continue present leases	$147.2 million
b.	Lease-purchase on NIH campus	92.3 million
c.	Federal construction on NIH campus	97.5 million

Factors that make the on-campus alternatives more attractive include land costs in the Bethesda area, ability to design efficiency into space-per-person calculations, reduced costs of building services, and the favorable financing now available.

Question. During last year's hearings, you provided the Committee with a brief status of the two renovation projects, Clinical Center Modernization and Laboratory Renovation. Could you briefly describe the progress of these projects and how the lack of a request in 1988 will affect them?

Answer. Careful phasing of the work on both these projects is critical since interruptions to scientific research and clinical care must be minimized. To date, progress on both these projects has been steady because the appropriated funds have kept pace with the timing of design and construction awards. Although the 1988 request does not include funds for either of these projects, momentum will be maintained with funds appropriated thus far. The projects will require, however, 5 or 6 more years of funding beyond 1988 for completion.

Question. An amount of $4.9 million has been provided to date to initiate the NICHD/Neurological Sciences building. What is the status of this project?

Answer. The NIH has performed an exhaustive review of its needs to consolidate NICHD programs, research in the neurosciences, and programs requiring the use of primates in AAALAC accreditable space, and has developed a plan that calls for numerous program moves that achieve these objectives. Essentially the plan will provide NICHD with a greater consolidation of its programs in the new building and the accommodation of others in expanded space in Building 6B. The new building will also provide accreditable primate facilities and space for research in the neurosciences. We are now in the process of writing the final program specifications for the building that will commit us to this plan of action. Solicitations have been issued for architect-engineer and construction management services. Contracts are scheduled to be let during the summer of 1987, and the design for the new building should be completed during FY 1988.

MINORITY INSTITUTIONS

Question. Dr. Wyngaarden, can you fill us in on the Research - Centers in Minority Institutions Program? How is this program going?

Answer. The Research Centers in Minority Institutions (RCMI) Program was developed in 1985 to establish research centers in those predominantly minority institutions that offer doctoral degrees in the health professions or the sciences related to health. The program acknowledges the historical role that minority educational institutions have traditionally played in training a large portion of professionals who provide health care to the minority community. The RCMI grants are intended to enhance significantly the capacity of such institutions for the conduct of biomedical and/or behavioral research by strengthening and augmenting both their human and physical resources. The program is administered by the Division of Research Resources on behalf of the Office of the Director, NIH.

Seven RCMI programs were initiated in FY 1985, with eight additional awards being funded in FY 1986, for a total of 15 active awards in FY 1986. The project period for each of these programs is 5 years. The recipient institutions (seven medical schools, two colleges of pharmacy, and six graduate schools) are located in Hawaii, California, Texas, Tennessee, Georgia, Florida, New York, Washington, D.C., and Puerto Rico.

The RCMI awards have enabled several institutions to expand their research expertise by supporting new faculty positions and providing resources that are needed to continue on-going faculty research. The awards can be used to upgrade a variety of research facilities (including animal quarters), provide for up-to-date research equipment, and fund core laboratories. Research can thus be expanded in basic areas such as gene structure and function as well as in human immunogenetics. Some of the disease states that can be studied are kidney disease, cancer, diabetes, hypertension, sickle cell disease, and AIDS--diseases that affect both minority and majority population groups.

Question. Is there any way that these grants could be included when making consideration for Biomedical Research Support Grants (BRSG)? Do they differ that significantly from other types of NIH support?

Answer. RCMI awards do not count toward the eligibility for Biomedical Research Support Grants (BRSG) because, like BRSG, they primarily provide resources to stengthen the research environment and only secondarily support research per se. The RCMI awards, therefore, complement rather than duplicate regular research grants and program project grants--the principal types of awards that the BRSG was intended to augment. Also not counted toward BRSG eligibility, in keeping with long-held NIH policy, are contracts, research training grants, research fellowships, conference grants, institutional development awards, and center core grants.

SLEEP DISORDERS

Question. Dr. Wyngaarden, during the past year, NIH has developed a Trans-Institute Coordinating Committee for Sleep Disorders Research. Can you give us a progress report on these activities?

Answer. NIH established a Trans-NIH Sleep Research Coordinating Committee in March 1986. The four Institutes active in sleep research are represented: the National Institute of Neurological and Communicative Disorders and Stroke; the National Heart, Lung, and Blood Institute; the National Institute on Aging; and the National Institute of Child Health and Human Development. A liaison representative from the National Institute on Mental Health, ADAMHA, also serves on the Committee.

The Committee functions as a trans-Institute advisory committee, reviewing sleep and sleep-related research activities and future plans. For example, Committee representatives attended a meeting of the Associated Sleep Research Societies in June 1986. As a result, areas of concern and possible new initiatives have been identified for Committee discussion and consideration in FY 1987. Also, to give the sleep research community an opportunity to participate in program and policy planning, the Coordinating Committee has begun the process of setting up a special meeting at which representatives of professional sleep research societies and members of the scientific boards of lay organizations will meet with the NIH Coordinating Committee to review the entire area of sleep research. For this special meeting, the NIH Coordinating Committee will be augmented by representatives from the Advisory Councils of the participating Institutes. The meeting will be held in late summer or early fall.

The NIH Coordinating Committee is preparing an annual report on sleep and sleep-related research supported by the NIH and the NIMH.

Questions Submitted by Senator Daniel K. Inouye

HEALTH AND BEHAVIOR

Question. The Committee has received from the NIH the report it requested last year concerning health and behavior research supported by the NIH in FY 1986. The report indicates that NIH has increased its funding of health and behavior research from $107 million in FY 1985 to $147 million in FY 1986. Dr. Wyngaarden, I am pleased that the NIH is showing progress in this regard and would like you to highlight the major health and behavior research initiatives undertaken during FY 1986.

Answer. Several research components at the NIH support initiatives relevant to health and behavior, with the common theme of disease prevention and health promotion running through most of them. Each component has identified its own research initiatives, as described in the report on "Health and Behavior Research Supported by the NIH, FY 1986." The following highlights, as described by the respective Institutes, are illustrative of the range of activities under way.

NIA

As the lead Institute in the NIH Working Group on Health and Behavior, NIA has intensified its emphasis on psychosocial processes, as they interact with biomedical processes, to influence health and functioning during the middle and later years of life. Specific research initiatives have centered around four selected areas: 1) behavioral geriatrics research; 2) cognitive, intellectual, and sensorimotor functioning; 3) social and environmental interventions (in the home, workplace, community, and health care institution) to promote and maintain health and effective functioning; and 4) the functioning and health of the "oldest old." Research under these initiatives includes such topics as large-scale survey investigations of social and behavioral risk factors for morbidity, mortality, or utilization of health care in older adults; social, behavioral, or environmental interventions for preventing and treating age-related declines in cognitive functioning and physical health; studies of symptom recognition and responses by the elderly; and improving methods and data for forecasting life expectancy and active life expectancy in the oldest old. In addition to these specific areas, the NIA continues to encourage research on social and behavioral factors in the disparities in health status, health care, and mortality among different ethnic and minority populations and those afflicted with Alzheimer's disease and other dementias. This program demonstrates that social and behavioral factors are critical in the promotion of health, in prevention and treatment of disease, and in affecting normal aging processes.

NCI

The National Cancer Act, which was signed in December 1971, mandated that NCI support not only programs in basic research but also those that apply the results of that research. Over the past 15 years an impressive information base in cancer research has been generated and is now available to address the prevention and management of cancer. Of particular importance is the evidence linking lifestyle and environmental factors to a number of cancers. The Institute addresses health and behavior initiatives that focus principally on modifying lifestyle factors and health risk behavior. Priority areas include intervention trials directed at: reducing smoking and tobacco use prevalence; modifying dietery factors; influencing behaviors related to the early detection of cancer; and fostering health promotion studies directed at specific target groups such as the elderly, minorities, cancer patients, and their families.

NHLBI

A major NHLBI initiative is on biological and behavioral factors in smoking relapse. The objective is to stimulate research in humans on the short- and long-term biological and behavioral effects of smoking cessation that contribute to smoking relapse and on the biological and behavioral effects of relapse.

NIDR

Areas of major study include research on the behavioral aspects of pain, on prevention, and on treatment and treatment outcomes. It is of particular interest that behavioral research has been integrated into a number of multidisciplinary dental research efforts.

Two currently supported pain research program projects and a new Pain Research Center, funded in FY 1986, involve close collaborations among neuroscientists, dental scientists, and behavioral scientists intent on the better understanding of orofacial pain and its treatment. In addition, two NIDR Small Business Research Innovation Grants involve applied behavioral science. One of these projects aims to improve patient preparation for major dental procedures, such as dental implants or orthognathic surgery, through the use of computer-assisted video disc technology. The goal of this project is to educate patients about their expectations concerning immediate postoperative problems and long-term outcomes. Other behavioral research is developing improved methods for assisting patients in establishing more consistent and effective oral self-care behaviors and is assessing psychosocial attributes of various subgroups of patients with chronic orofacial pain.

NIDDK

Much of NIDDK's research related to health and behavior, particularly regarding diabetes, deals with the critical problem of improving patient compliance or cooperation with required preventive or therapeutic regimens. The Institute also supports research on the relationship betweeen psychological stress and fluctuations in the course of diabetes. Other studies are examining aspects of depression in diabetics and attempting to determine the incidence, nature, and degree of motor and cognitive deficits in children and adults with insulin-dependent diabetes. Research has suggested that relationships exist between symptoms of certain digestive diseases and behavioral and psychosocial variables. Institute-supported studies on the biochemical and physiologic linkages between the nervous and digestive systems are expected to enhance our understanding of these relationships and, ultimately, stimulate the development of efficacious methods of treatment. In the area of obesity, research supported by NIDDK is studying early nutrition behavior in children, taste responsiveness, and family eating and activity profiles. Also supported is behavioral and social research on eating disorders such as bulimia and anorexia nervosa. Finally, the Institute is supporting research to determine the longitudinal effects of end-stage renal disease on neuropsychological function, particularly the effects of different forms of dialysis or kidney transplantation on such function.

NINCDS

The NINCDS is encouraging grant applications that will deal with the behavioral aspects of: rehabilitation after cerebrovascular accidents occurring in blacks and minorities; the conditions of low back pain; the nature of the dementia that can be associated with cerebrovascular disease; and the possibility of cochlear implants as aids for deaf children.

NICHD

Research on health and behavior is supported in several NICHD programs. For example, the Human Learning and Behavior Program encompasses behavioral pediatrics, developmental behavioral biology, learning and cognition, communication, and social and effective development. The Mental Retardation and Developmental Disabilities Program supports activities such as behavior-analytic studies,

behavioral pharmacology, diagnosis and intervention, family and community studies, and language and communication skills. Some research in the Endocrinology, Nutrition, and Growth Program is included, such as behavioral correlates of endocrine disorders, obesity, and nutrition. In the Demographic and Behavioral Sciences Program, research in the area of the determinants and consequences of fertility, fertility regulation, adolescent fertility, mortality, family dynamics, and population movement and change are included.

NCNR

Because the National Center for Nursing Research was established on April 18, 1986, seven months into FY 1986, it was not possible to initiate health and behavior initiatives before FY 1987. However, it was obvious that health and behavior research would be a major concentration area for the Center. Thus, initial emphasis areas in health and behavior research were identified by the beginning of FY 1987. These include: 1) identification of approaches to deter adolescent initiation of behaviors that contribute to health risk (e.g., substance abuse, sexual behavior in early adolescence, patterns of nutrition that militate against optimal growth and development); 2) development of cost-effective educational, sociological, and anthropological methods that can contribute to the reduction of morbidity and mortality in high-risk pregnant women and their infants; 3) the determination of the health effects of various nursing interventions in AIDS, including the cost effectiveness of these interventions; and 4) identification of effective strategies for encouraging compliance with treatment regimens, including modification of eating patterns, that contribute to better outcomes in chronic illness.

Question. Dr. Wyngaarden, last year in the House report accompanying the FY 1987 Labor-HHS-Education Appropriations Act, the Committee urged NIH to direct each of its research Institutes to consider increased support of health and behavior research..." I see that several of the Institutes were able in FY 1986 to achieve a sizable increase in their support of health and behavior research. These Institutes include NCI, NHLBI, NIAID, NICHD, NIA and DRR. Other Institutes, however, show little or no progress in expanding their portfolio of health and behavior research. Please explain why NIH was not able to expand its support of health and behavior research at each Institute. What accounts for the disparity among the individual Institutes in regard to their progress in expanding this type of research?

Answer. The figures quoted in the report reflect the status of the health and behavior programs in FY 1986 as compared to FY 1985 and therefore do not reflect the Institutes' considerations of the Committee's recommendation in its FY 1987 report. We anticipate continued increases in FYs 1987 and 1988. Nevertheless, in the aggregate, in FY 1986 the NIH exceeded the previous year's obligations in health and behavior by nearly 38%.

With regard to the disparity among the Institutes, it should be noted that health and behavior initiatives are not inherent to the missions of some Institutes. Consequently, one cannot expect to see increases of any magnitude in these NIH components.

For example, with its goal of understanding the functional

integration of the nervous system and how environmental agents may interfere with this integration, NIEHS does not usually support research projects in the area of health and behavior. Similarly, the mission of NIGMS is to support basic biomedical research and research training with special emphasis on studies concerned with expanding our knowledge of fundamental biological structures, their basic mechanisms, and their functions; thus the Institute does not regularly support research on health and behavior.

Question. What efforts were made during FY 1986 to coordinate health and behavior research among the research Institutes?

Answer. Health and behavior research at NIH is coordinated through the NIH Working Group on Health and Behavior, chaired by Dr. Matilda White Riley of the National Institute on Aging. It was established in December 1981 as a continuation of the NIH/ADAMHA project on Health and Behavior reported by the Institute of Medicine. The Group includes representatives from all the NIH research components, and meets monthly. The charge of the Working Group is to:

-- Share across all NIH Institutes programmatic and scientific information of mutual interest on health and behavior;

-- Provide a forum for consideration of new developments at NIH;

-- Keep abreast of parallel activities of other groups in the public and private sectors; and

-- Make recommendations as appropriate to the Director, NIH.

The Group exchanges information and plans, arranges seminars, compiles information as requested by the Director, NIH, makes recommendations to the Director from time to time, and supplies information to NIH research components and the scientific community. During FY 1986 the central theme of the seminars was Health Promotion.

The Working Group also reviews research conducted by each Institute, organizes scientific discussions on topics relevant to program development in several Institutes, and exchanges information with other Federal agencies, thus building on earlier efforts supported by the former Assistant Secretary for Health to launch an integrated PHS program of research on Health and Behavior.

Question. What specific steps have been taken to encourage the research community to submit proposals related to health and behavior?

Answer. During FY 1986 a considerable number of Health and Behavior Research and Training Programs Announcements, Requests for Proposals, and Requests for Applications were issued by the NIH, as listed below:

RESEARCH SOLICITATIONS--FY 1986

National Cancer Institute

1987 National Health Interview Survey Cancer Control Supplement
Avoidable Mortality from Cancer in Black Populations
Primarily Prevention (Smoking) in Black Populations
Increasing the Use of Mammography and Breast Palpation for Early Detection of Breast Cancer
Reduction in Avoidable Mortality from Cancers
Small Grants Research Program
Community Clinical Oncology Program
Quality Survival of Childhood Cancers
Prevention and Cessation of Use of Smokeless Tobacco
Community Intervention Trial for Heavy Smokers - Intervention Centers
Community Intervention Trial for Heavy Smokers - Coordinating Centers

National Heart, Lung, and Blood Institute

Biological and Behavioral Factors in Smoking Relapse
Research in Nutrition and Cardiovascular Disease
Diet Intervention in Children with High LDL
Health Care-Seeking Behavior Among Blacks
Model Systems for Blood Cholesterol Screening
Demonstration and Education Research in Cystic Fibrosis

National Institute of Neurological and Communicative Disorders and Stroke

Local Neuronal Interactions
Integration of Autonomic and Somatic Divisions of the Nervous System
Neurophysiology of Cognitive Processes
Nervous System Modulation of Immune Responses and Interactions Between the Nervous and Immune Systems

National Institute on Aging

Maintaining Health and Effective Functioning in the Middle and Later Years
Forecasting Life Expectancy and Active Life Expectancy
Exploratory Studies Grants in Minority Aging

In addition to these, many of the Institutes have standing program announcements that call for research on health and behavior. For example, the National Institutes on Aging has standing announcements on "Health and Effective Functioning in the Middle and Later Years" and on "Health Behaviors and Aging." NIA also has a special training award to encourage social and behavioral scientists to learn more about the biological and physiological processes that interact with psychosocial processes as people grow older.

Research on health and behavior is also encouraged at major scientific meetings. For example, major symposia were held at the 1986 annual meetings of the American Psychological Association, the American Sociological Association, and the American Association for the Advancement of Science. Attendance and participation by NIH staff in these meetings, as well as those of the Academy for

Behavioral Medicine Research and the Society for Behavioral Medicine, serve to encourage research on health and behavior.

These scientific sessions lead to many published volumes and articles, constituting another mechanism for identifying and encouraging important research on health and behavior issues. Currently being published, for example, is a volume of wide-ranging papers entitled Perspective on Behavioral Medicine Research (Vol. IV): The Aging Dimension (Riley, Baum, and Matarazzo).

Question. Dr. Wyngaarden, although the NIH has documented an overall increase of about $40 million in funding allocated to health and behavior research, the total amount devoted to these activities still represents less than 3% of the total NIH budget. In view of the fact that seven out of the ten leading causes of death in the U.S., accounting for 50% of all mortality, may be behaviorally determined, what are some of the major health and behavior research priorities in the FY 1988 budget request?

Answer. Apart from the pervasive and continually reemphasized theme of health promotion and disease prevention, most Institutes have special initiatives for the FY 1988 budget that are concerned with critical behavioral and social factors in morbidity and mortality. The examples below are illustrative.

NIA

Two areas of the NIA program, though promoted earlier, are receiving intensified efforts for FY 1988 as interest and expertise develop in the scientific community. These areas are: the "oldest old" (people aged 85 or more) and strategies for maintaining health and effective functioning. Special topics to be highlighted include research on: cognitive functioning and aging; effects of gender on health and longevity; aging and work environments; and issues in demography and population epidemiology (such as the establishment of adequate national data bases on aging populations and the forecasting of the health and health care needs of the older population). NIA will pay special attention to social and behavioral research related to the need for and use of medical and non-medical long-term care for chronically ill persons and their families (as outlined in an NIA Implementation Plan for Long-Term Care Research for FY 1987 and Future Years). Research and research training applications in Health and Behavior will be solicited in especially neglected populations such as the oldest old, ethnic and minority populations, the rural elderly, or persons with Alzheimer's disease and other dementias.

NCI

At NCI, most of the implementation trials discussed earlier will continue throughout FY 1988 with some extending into the next decade. As appropriate, strategies that have been tested and found effective in modifying health behaviors will be extended into large scale demonstration trials.

NHLBI

NHLBI intends to continue development and research in: 1) smoking cessation and maintenance; 2) stress-dietary interactions; 3) the role of social support in the development and progression

of cardiovascular diseases; and 4) developing standard biobehavioral measurements in cardiovascular behavioral medicine research.

NIDR

As a result of the findings of the 1985-86 National Survey of the Oral Health of Employed Adults and Older Americans, a strategy focusing on the health and behavior of adults aged 30 to 60+ is being developed. Therefore, the focus of research and science transfer activities in NIDR will be to identify key behaviors that can be adopted by older-aged and high-risk groups that can lead to improvements in their oral health. Encouraging the use of known efficacious preventive and therapeutic measures by both the public and health professionals, and developing strategies to promote the maintenance of these measures, should move us closer to the goal of retaining the human dentition for a lifetime. The NIDR behavioral and social research program seeks to stimulate research on the contributions of lifestyle, personal services and environmental influences on oral health, including social, economic, and culture factors among them.

NIDDK

A major research focus in NIDDK is the biochemical and physiologic linkage between the nervous and digestive systems. Intensified study of these interactions is expected to provide insight into the relationship between psychosocial factors and visceral physiology and pathophysiology. Possible topics of study include significant life changes and other stresses on symptoms of digestive disorders, and the role of psychosocial and medical intervention in their management. In a separate effort, the Institute's Diabetes Research and Training Centers will be increasing their focus on the behavioral and psychosocial problems encountered by diabetics through the training of health professionals who interact with these patients.

NINCDS

The NINCDS will support a continued interest in the varieties of chronic pain and in encouraging research on how children with language disorders can be helped, so different modes of treatment (e.g., biofeedback, hypnosis, and psychotherapy) may be selectively developed.

NICHD

The NICHD will place increased emphasis on: childhood injury; forestalling the initiation of smoking; genetic studies and learning disabilities; early intervention to prevent developmental delay; and studies of family change, minority status, and extra familial influences on children's health and behavioral development. In the area of mental retardation and developmental disabilities, the Institute will pursue research on the application of behavioral strategies for reducing behavior problems among retarded persons; the development of non-invasive behavioral techniques to identify children at greatest risk for mental retardation among infants at risk; and the development of preventive behavioral interventions. The relationship between mental retardation and child abuse and neglect will also be studied. Research will also be undertaken on behavioral aspects of childhood obesity, social and behavioral

factors affecting the nutritional status of pregnant and lactating women, and psychological aspects of nutritional behavior. Special efforts will be undertaken in such areas as the relationship between sexually transmitted disease and fertility related behavior, the relationship of the availability of child care to fertility, studies of adolescent fertility related to behavior, and research on the social and demographic aspects of infant mortality and low-birth-weight.

NCNR

In FY 1988, the NCNR will carry out research planning workshops to identify health behavior research priorities in identified emphasis areas within the purview of the NCNR mission. Information from these workshops will be the basis for identification of new initiatives aimed at stimulating research pertaining to health behavior.

ADVISORY COUNCIL REPRESENTATION

Question. Public Law 99-158 contained specific language mandating that behavioral and social scientists be included in the group of representatives from the health and scientific disciplines from which two thirds of NIH Advisory Councils are to be chosen. What specific efforts were made in 1986 by the NIH to increase the representation of behavioral and social scientists on NIH Advisory Councils? What were the results, if any, of these efforts?

Answer. During 1986, charters of all NIH national advisory councils were amended to include language in P.L. 99-158, which states: "Two-thirds of the members shall be...leading representatives of the health and scientific disciplines (including public health and the behavioral or social sciences)..." This new requirement was discussed at many staff meetings, beginning at the level of the Director, NIH, through the Directors of the Institutes and Divisions, to the executive secretary level where the nomination process begins. All staff were encouraged to add to their nomination slates individuals with scientific proficiency in these areas if such disciplines were not already represented on their councils.

These efforts resulted in an increase from 24 to 39 members with social and behavioral education, training, or experience on the 14 NIH national advisory councils. The 24 individuals were composed of 9 scientists and 15 public representatvies; the 39 are composed of 17 scientists and 22 public representatives. This is a significant increase when the average number of vacancies per year for each council is four and includes the need for other basic biomedical scientists and one or two public members. In addition, six social and behavioral scientists will be nominated for membership on 1987 slates.

Question. Please describe for the record the current representation of behavioral and social scientists on each NIH Advisory Council.

Answer. The current representation is as follows:

National Advisory Allergy and Infectious Diseases Council	1 public representative
National Advisory Child Health and Human Development Council	3 scientists 1 public representative
National Advisory Council on Aging	3 scientists 3 public representatives
National Advisory Dental Research Council	3 scientists
National Advisory Environmental Health Sciences Council	none
National Advisory Eye Council	1 scientist 1 public representative
National Advisory General Medical Sciences Council	1 public representative
National Advisory Neurological and Comunicative Disorders and Stroke Council	1 scientist 2 public representatives
National Advisory Research Resources Council	none
National Arthritis and Musculoskeletal and Skin Diseases Advisory Council	4 public representatives
National Cancer Advisory Board	6 public representatives
National Center for Nursing Research Advisory Council	4 scientists 2 public representatives
National Diabetes and Digestive and Kidney Diseases Advisory Council	1 scientist 1 public representative
National Heart, Lung, and Blood Advisory Council	1 scientist

Questions Submitted by Senator Lowell P. Weicker, Jr.

CHRONOLOGY OF THE BUDGET REQUEST

Question. Dr. Wyngaarden, would you please tell us what the original NIH FY 1988 budget request was to the Public Health Service? What was the PHS request to the Department? What was the Department's request to OMB?

Answer. Our original request to PHS was $6,915 million, and the PHS request to the Department was $5,886 million; the base used for the development of these submissions was the FY 1987 President's Budget of $5,079 million. The Department's request to OMB was $5,302 million; the base for the develoment of that submission was the FY

1987 appropriation of $6,180.7 million. All these figures have been adjusted to include AIDS research, which was submitted as a separate request.

EXTENDED AVAILABILITY PROPOSAL

Question. Did your original request to the Public Health Service include a proposal to defer the availability of FY 1987 money into FY 1988?

Answer. No. The extended availability proposal originated with the FY 1988 initial budget allowance from OMB.

CURRENT SERVICES

Question. How much would NIH need in FY 1988 to sustain the same level of research activity you are currently supporting with the FY 1987 appropriation of $6.1 billion?

Answer. A total of $6,935 million would be needed in FY 1988 to sustain the same level of research activity that would be supported at the FY 1987 appropriation level plus the program increase in the President's Budget for AIDS.

RESEARCH PROJECT GRANTS

Question. Dr. Wyngaarden, if we assume Congress will not support the President's request to cut FY 1987 to pay for FY 1988, how many new and competing research project grants would be supported by a $5.5 billion appropriation? How many with $5.8 billion?

Answer. If the President's proposal to extend the availability of $334.4 million of FY 1987 appropriated funds is rejected by Congress, NIH would be able to support approximately 1,916 competing research grants at the President's Budget request of $5.5 billion for FY 1988. If NIH were provided $5.8 billion in FY 1988, we would be able to support approximately 3,900 competing grants.

Question. Dr. Wyngaarden, are we funding grant awards at their fully recommended level? At what percent are grants funded?

Answer. Under the FY 1987 appropriation, the NIH is applying downward negotiations of approximately 4% and 6% of committed/recommended levels for noncompeting continuations and competing research project grants, respectively. These include the usual, historical negotiations of 1% for noncompeting continuations and 3% for competing research project grants.

Question. What impact would the President's Budget request have on funding individual grants?

Answer. The FY 1988 President's Budget request would require downward negotiations of approximately 17% and 18% from committed/recommended levels for noncompeting continuations and competing research project grants, respectively.

Question. At what point does the reduction from recommended funding levels become critical? What effect does this reduction have on research?

Question. From a scientific viewpoint, I believe that decreasing grant budgets by more than 10% from recommended levels could lead to severe disruptions in the investigators' ability to perform the approved research. While investigators with larger grants, such as program and center projects, might be able to accomplish essential functions by rebudgeting within available funds, most investigators would need to reduce important support and professional staffs and to forego expenditures for some otherwise essential equipment, supplies, travel, and patient and animal work. These limitations could disrupt the grantees' ability to accomplish research goals and thus impede scientific progress on the projects.

From a economic viewpoint, however, I can understand and support the fact that greater reductions than 10% may be necessary.

NIH STAFFING

Question. Dr. Wyngaarden, Congress has traditionally included a directive on full-time equivalent (FTE) staff positions in the report accompanying the NIH appropriation. Last year, Congress expected NIH to support no fewer than 13,507 FTEs. Will you support that number this year? How many are you requesting under the President's Budget? How many FTEs did you request as part of your original budget request for FY 1988?

Answer. The FTE level for FY 1987 is 12,850. The FY 1988 President's Budget includes a request for 12,900 FTEs at NIH. Our original FY 1988 submission to the PHS contained a request for 13,519 FTEs.

RESEARCH CENTERS

Question. Dr. Wyngaarden, I understand the FY 1988 budget proposes to maintain the same number of research centers as in FY 1987, but the research centers budget is cut $1.4 million. What impact will this reduction in funds have on the research centers?

Answer. Because the FY 1988 request for research centers includes no average cost increase for inflation and, in fact, proposes an overall reduction of $1.4 million, we will need to reduce the size and scope of certain center grants. This will require that investigators postpone some previously approved research activities as well as reduce the purchase of supplies and equipment. At the FY 1988 request level, downward negotiations from full recommended levels for research centers range by Institute from 24% to about 3%.

Question. Are the research centers currently fully funded at their recommended levels?

Answer. In the aggregate, research centers are being reduced by about 6% from their full recommended amounts in FY 1987. The levels of downward negotiations vary by Institute from about 19% to 0%.

THIRD-PARTY REIMBURSEMENTS

Question. What impact does third-party reimbursement have on the funding of research centers?

Answer. Third-party reimbursements are a factor in those research centers that provide patient care, particularly the General Clinical Research Centers (GCRCs) funded by the Division of Research Resources. For example, the GCRC program pays all the hospital costs of patients admitted solely for research studies. However, any patients who are being treated for an illness at the same time they are being studied on a research protocol are billed for that portion of their care, usually through their third-party insurance carriers. For a number of years, the amount of these third-party reimbursements ranged from $13 to $16 million a year; recently, however, those offsets have diminished significantly. As a result, costs previously paid by third-party carriers are now paid through GCRC appropriated dollars.

Question. Do you anticipate any changes in the availability of these third-party reimbursements next year?

Answer. If changes are developed in the formulas for payments made in accordance with the Medicare Diagnostic Related Groups, reimbursements for patients on research protocols will also change. We understand that other third-party payers are also reviewing their payments, with an eye toward reducing reimbursements whenever possible.

Question. How will a reduction in these reimbursements affect funding for these centers?

Answer. If third-party reimbursements decrease, the GCRCs will be forced to charge a larger proportion of the patient care costs back to their grants. The result is that the centers will become more dependent on Federal appropriated dollars for their continued support, and less dependent upon third-party reimbursements.

NIH CENTENNIAL

Question. Dr. Wyngaarden, would you please highlight some of the activities NIH is sponsoring as part of its Centennial celebration?

Answer. The NIH Centennial observance has two objectives. One is to educate the public about health benefits resulting from biomedical research accomplishments over the past 100 years, and about the roles that NIH, academia, the private sector, and voluntary and professional organizations have played in these accomplishments. The second objective of the Centennial is to stimulate the interest of young people in biomedical research careers so that progress will continue. All Centennial activities play a role in helping to meet one or both of these objectives.

A major event of the NIH Centennial is the airing in October 1987 of a pulic television series, which will tell the story of the partnership that has brought about this revolutionary century in the biomedical sciences. While not specifically about the NIH, the NIH will be featured throughout the series as one of the leading partners responsible for advances in biomedical research.

A commemorative book is being written as a companion to the film series. The book is being published by Doubleday. Several

thousand copies will be provided, as part of the Centennial education program, to public schools and libraries through the country.

The film series will also form the basis for a science curriculum being developed for distribution, free of charge, to secondary schools. NIH plans to include quality health and biomedical science educational materials in these curricula, while incorporating a motivational dimension to encourage young people to consider biomedical research careers.

The NIH hosted an NIH Centennial Scholars and Teachers Program from February 28 to March 3, 1987. The Program was designed to recognize the efforts of those teachers who inspire scientific interest and excellence as well as encourage outstanding high school students to consider careers in biomedical research. On the basis of scientific aptitude and scholastic achievement, students were selected from each of the 50 states, the five U.S. territories, and the District of Columbia. Each student named the teacher who most influenced his or her interest in science. The Centennial Scholars and Teachers were brought to Washington, D.C., for a 3-day program including lunch with 17 Nobel laureates, a breakfast on Capitol Hill hosted by Senator Edward Kennedy, visits with their congressional representatives, visits to NIH biomedical research laboratories, and briefings with many of NIH's outstanding researchers. In addition, each student received a small scholarship.

Another activity that will be geared toward interesting America's youth in biomedical research careers is a 1-day event, "A Symposium on Career Opportunities in the Biomedical Sciences," jointly sponsored by the NIH and the Association of Minority Health Professions Schools. The symposium, which will be held in April at Meharry Medical College, is being designed to stimulate, promote, and recruit minorites into health careers.

Other major activities sponsored by NIH will take place in October. The first is an NIH "open house," which will include exhibits, films on various health subjects, interactive displays, and prominent guests. The first day will devoted to the general public and NIH employees; the second day will be devoted to school children and senior citizens. The second activity in October is an Alumni/Reunion Weekend, including a program of scientific symposia, social events, and a Centennial ceremony to which we are inviting the President.

I would like to add that we at the NIH have been very pleased with the interest in the NIH Centennial from the biomedical research community in this country and throughout the world. Activities are taking place each month throughout the country with major events occurring in Connecticut, Massachusetts, New York, Pennsylvania, North Carolina, Missouri, Washington, Texas, and California. These activities include symposia, lectures, open houses, and special events such as the dedication of a permanent marker at the original NIH facility on Staten Island. Involvement in the NIH Centennial from international groups has also been gratifying. Examples include a joint NIH/Pasteur Institute symposium in May; an international salute to the NIH at the meeting of the European Medical Research Council in June; and the creation of an NIH Alumni Association of Japan with events commemorating the NIH Centennial and NIH-Japanese cooperation in biomedical research. The interest of groups through-

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out the world to share in observing the NIH Centennial indicates to us that NIH is a national treasure, one made possible because of the support of our goverment.

BIOMEDICAL RESEARCH SUPPORT GRANT PROGRAM

Question. Once again, this year's budget proposes eliminating the Biomedical Research Support Grant (BRSG) program. Like last year, the justification for eliminating this program is based on budget constraints and not on the merits of the program. Dr. Wyngaarden, who does this program serve?

Answer. The BRSG program serves those institutions most heavily involved in biomedical research. Recipient institutions include U.S. health professional schools, colleges and universities, hospitals, and nonprofit research organizations. To be eligible for support from the BRSG program, an institution must have received at least three PHS biomedical or health-related behavioral research grants totaling $200,000 or more.

Question. How many research institutions participate in this program?

Answer. The BRSG Program made awards to 575 research institutions in FY 1986, and an estimated 594 institutions will receive awards in FY 1987. The number of institutions participating has been increasing each year as more and more institutions cross the eligibility threshold.

Question. How much would you need to add to the FY 1988 budget request to provide the same level of activity in this program next year as the NIH is currently supporting in its FY 1987 budget?

Answer. Approximately $62.5 million would be required in FY 1988 to maintain the FY 1987 level of activity in the BRSG program.

ANIMAL FACILITIES

Question. Dr. Wyngaarden, in response to a request by Congress, the NIH has submitted a report on current and long-term needs for facilities housing laboratory animals. The report concludes that "a large number of the institutions engaged in research involving laboratory animals need extensive restoration or new construction of laboratory animal facilities." What is the status of NIH's laboratory animal facility improvement program?

Answer. In 1985, the Division of Research Resources initiated a new Animal Facilities Improvement Program to help extramural institutions upgrade their animal facilities and develop centralized programs of animal care in support of their biomedical research programs. The grants enable institutions to comply with the Animal Welfare Act and the Public Health Service Policy of Humane Care and Use of Laboratory Animals. Improvement grants are normally made for one year, and support such items as cages that meet current standards, sanitation equipment, and renovation of animal facilities. Each award is limited to $500,000 with a dollar-for-dollar matching requirement for awardee institutions. In FY 1985 DRR awarded 23 institutional improvement awards at a cost of $8.7 million. In FY

1986, 18 new awards were made at a cost of $3.8 million. A new request for applications was announced in July 1986 for FY 1987 competition.

Within the NIH intramural program, considerable progress has been made toward the accreditation and consolidation of animal facilities. The FY 1987 appropriation provided $13 million for the construction and renovation of various facilities at NIH. These facilities include construction of Building 110A, 6B and 14D Auxiliary; major renovation of Building 10A; construction of a new mezzanine floor in Building 36; and minor renovations in Buildings 7, 14, and 30. All projects are either in design or construction. The projected completion date for all construction is early in FY 1989.

Further contributing toward the upgrading and consolidation of animal holding space is the renovation of portions of Buildings 41 and 14F. These renovations have been accomplished independent of the FY 1987 appropriation. Additionally, minor projects have been identified throughout the NIH facilities in support of AAALAC accreditation.

While much has been accomplished, the new NICHD/Neurosciences/Primate Facility remains the major keystone for the future consolidation of nonhuman primates.

Question. How much will NIH spend on improving the conditions of animal facilities this year? How much are you requesting in FY 1988?

Answer. In the extramural program, the Division of Research Resources has $9,981,000 available for the Animal Facilities Improvement Program in FY 1987. In addition, $3,500,000 is available in the Primate Research Centers Program for primate center renovations and improvements. The FY 1988 budget request for DRR includes $9,981,000 for the Animal Facilities Improvement Program, the same level as in 1987. The FY 1988 request also includes $2,000,000 in the Primate Research Centers Program for primate center renovation and improvements.

The FY 1987 Buildings and Facilities appropriation for NIH includes $13 million for the consolidation and accreditation of animal facilities at NIH. Nearly all this will be obligated by the end of the fiscal year. The FY 1988 request does not include any funds for this project.

SUBCOMMITTEE RECESS

Senator CHILES. The subcommittee will stand in recess until this afternoon at 2:30 when we will meet here in SD–138 to continue with the National Institutes of Health. Thank you very much.

[Whereupon, at 10:40 a.m., Tuesday, March 10, the subcommittee was recessed, to reconvene at 2:30 p.m., the same day.]

(AFTERNOON SESSION, 2:30 P.M., TUESDAY, MARCH 10, 1987)

The subcommittee met at 2:30 p.m., in room SD–138, Dirksen Senate Office Building, Hon. Lawton Chiles (chairman) presiding.

Present: Senators Chiles, Hatfield, Weicker, and Harkin.

DEPARTMENT OF HEALTH AND HUMAN SERVICES

NATIONAL INSTITUTES OF HEALTH

STATEMENTS OF:

JAMES B. WYNGAARDEN, DIRECTOR, NATIONAL INSTITUTES OF HEALTH

VINCENT DeVITA, DIRECTOR, NATIONAL CANCER INSTITUTE

ANTHONY S. FAUCI, DIRECTOR, NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASES

HARALD LÖE, DIRECTOR, NATIONAL INSTITUTE OF DENTAL RESEARCH

CLAUDE LENFANT, DIRECTOR, NATIONAL HEART, LUNG, AND BLOOD INSTITUTE

PHILLIP GORDEN, DIRECTOR, NATIONAL INSTITUTE OF DIABETES AND DIGESTIVE AND KIDNEY DISEASES

T. FRANKLIN WILLIAMS, DIRECTOR, NATIONAL INSTITUTE ON AGING

CRAIG K. WALLACE, DIRECTOR, JOHN E. FOGERTY INTERNATIONAL CENTER FOR ADVANCED STUDY IN THE HEALTH SCIENCES

OPENING REMARKS

Senator CHILES. This afternoon we are going to focus our session on the Institute's concern with cancer, allergies, dentistry, heart disease, diabetes, kidney disorders, and aging. Additionally, we are going to hear testimony from the Fogarty International Center.

The National Cancer Institute is the largest of the institutes. It is encouraging to see 20-percent increases in survival rates of cancer since the 1940's and learn that now 50 percent of all cancer patients can be cured. It is troubling, however, to learn that for people 55 years or over, the incidence of cancer continues to increase.

The National Institutes of Allergy and Infectious Diseases with a budget request of $815.3 million is the fourth largest of the institutes. It has the distinction, however, of conducting approximately 60 percent of the AIDS research now going on at NIH and the Director of the Institute is the NIH coordinator for AIDS research and activities.

The National Institute of Aging is conducting promising research on Alzheimer's and we look forward to learning about these and other

health issues this afternoon. We are delighted to have Senator Hatfield with us today.

Did you have an opening statement? Dr. Wyngaarden, why don't you give us the highlights of your opening statement and call on any of your compatriots also.

INTRODUCTION OF ASSOCIATES

Dr. WYNGAARDEN. Thank you, Mr. Chairman. I would like to introduce the Directors at the table with me. At my far left is Dr. Gordon who is the new Director of the National Institute of Diabetes, Digestive, and Kidney Diseases.

Dr. Harald Löe is the Director of the National Institute of Dental Research.

Dr. Vincent DeVita, Director of the National Cancer Institute.

Senator CHILES. You need to pull that mike up a little more.

Dr. WYNGAARDEN. Dr. Vincent DeVita is the Director of the National Cancer Institute.

On my right, Dr. Anthony Fauci, you met this morning, Director of the Allergy and Infectious Diseases Institute.

Dr. Claude L'Enfant, Director of the National Heart, Lung, and Blood Institute.

Dr. Franklin Williams, Director of the National Institute on Aging.

Dr. Craig Wallace, who directs the Fogarty International Center.

Mr. Chairman, you have already touched on many of the highlights of the programs represented by these Institutes. I think each Director is prepared to give a brief statement.

Senator CHILES. I think that would be helpful for us, if they would give us a brief statement.

Dr. WYNGAARDEN. Any particular order in which you would like to do them?

Senator CHILES. We can start with the National Cancer Institute, Dr. DeVita.

NATIONAL CANCER INSTITUTE

PREPARED STATEMENTS

Dr. DEVITA. Thank you very much, Mr. Chairman, Senator Hatfield. I am delighted to be here. I would submit my full statement for the record and just synopsize for you.

Senator CHILES. We will print all your statements in full in the record.

[The statements follow:]

Statement of Dr. Vincent DeVita

This year marks the 50th anniversary of the National Cancer Institute (NCI). Most important, we have just observed the 15th anniversary of the National Cancer Act of 1971, which greatly accelerated the pace of research. Over the past 15 years, basic research under the National Cancer Program has led us to an unparalleled understanding of the cancer cell. During this time, the question of cancer has been transformed from a complex mystery to what is considered a difficult but solvable scientific problem.

The greatest advances provided new knowledge of cancer biology--now being put to work to benefit present and future patients. Today's patients are already benefiting from our progress. Despite increasing incidence, and although the overall cancer mortality rate has remained quite steady, the cancer death rate is decreasing among whites under age 65 and among the general U.S. population under age 55. We are working to decrease mortality in minority and older cancer patients as well. Another encouraging report this year is that colon cancer death rates for all ages are decreasing despite an increasing incidence rate. We believe this reflects in part advances in cancer treatment and in part earlier detection. This year, we also have new, positive results from studies of adjuvant chemotherapy in patients with colorectal cancer.

A measure of treatment success--survival statistics--also reflects progress with a 5-year relative survival rate* of 59 percent for cancer patients under age 55, and 50 percent for cancer patients of all ages. An important advance not reflected in survival or mortality statistics is the great reduction in physical impairments from treatments for breast, bone, prostate, colorectal, and head and neck cancers.

Steady advances became possible when the National Cancer Act provided resources that fostered a biological revolution. Today, scientists are able to size, sequence, and scrutinize manageable pieces of DNA--the molecule of life which contains the genes--and decode nature's messages. We can now read what cancer genes have to say. This was unthinkable 15 years ago. I would like to briefly describe the cancer cell with its intricate circuits and switches. Then, I would like to highlight how our new knowledge and technology are improving the ways we diagnose, treat, and prevent cancer.

First, a major discovery was that normal cells can be transformed to cancer by oncogenes. An oncogene is a gene which becomes altered or moved to a new location on a chromosome where it is placed next to the wrong control switches. When such events happen, the gene produces an abnormal protein product or an increased amount of the normal product, which then leads to uncontrolled cell growth which is cancer.

However, antecedents to oncogenes, called proto-oncogenes, are involved in our normal development. They are turned on and off in

*The 5-year relative survival rate is the percentage of patients who survive 5 years following diagnosis of cancer, adjusting for normal life expectancy.

specific sequence to allow for normal cell growth. Additional genes, recently recognized as "anti-oncogenes," can suppress or put the brakes on the cancer process. When anti-oncogenes are out of commission, the cell is in trouble if oncogenes are turned on, because the oncogenes then predominate and the cell becomes cancer. About 40 human oncogenes have now been identified and researchers are studying how their protein products and control switches function.

Cancer cells are also able to leave the original tumor, travel through the body, and invade vital organs, causing death. Recently, oncogenes have been implicated in this process, called metastasis. This year, researchers discovered a new protein, called autocrine motility factor, that appears to play a significant role in tumor cell invasion. Further research on its mechanism may allow us to prevent a cancer from spreading.

Our evolving knowledge of the blueprint of cancer is presenting new targets for treatment and prevention. We are developing ways to jam, turn off, or otherwise stymie the cancer process. This year, the new cancer biology plays an increasingly important role at the bedside. For example:

- Recent studies indicate that osteosarcomas (bone cancer) and retinoblastomas (cancer of the eye in infants and children) have the same genetic change--which is a functional loss of a normal "regulator" gene that only functions as an anti-oncogene. These findings add to the understanding of the genetics of human cancers and may lead to improved early detection and diagnosis, and a greater understanding of the control of oncogenes.

- New genetic techniques are already being used to classify certain tumor types, such as hard-to-diagnose lymphomas and leukemias. These approaches are valuable for proper diagnosis (so the best treatment can be chosen), and valuable in monitoring the effectiveness of treatment.

- A new way of choosing specific treatment for aggressive tumors which share the same patterns of oncogene expression but have very different tissue types, has been tried and shown to be successful.

- The presence of extra copies of oncogenes in certain cancer patients has been correlated with poor prognosis. It is possible that using new drugs to inhibit oncogene expression or inactivate oncogene products could improve survival for these patients. Other recent research indicates that increased copies of an oncogene found in breast cancer may predict which patients will have recurrence, and, therefore, pinpoint those who do and do not need additional treatment after removal of the tumor.

- Recombinant DNA technology has made it possible to develop treatments with new biological agents--such as interferon, Interleukin-2 (IL-2), and, in the future, "antisense" compounds (complementary strands of genetic material designed to block the cancer message). The National Cancer Program continues to support the development of biologicals, and today, private industry is joining in our efforts. In 1986, alpha interferon, effective against hairy cell leukemia and chronic myelocytic leukemia, became the first

biological produced by recombinant DNA technology to be licensed for commercial distribution in the United States.

• The promising use of human immune cells called LAK (Lymphokine Activated Killer) cells, plus IL-2, was reported in patients with advanced cancers. This "adoptive immunotherapy" approach was moved quickly from basic research to patient studies. Last year, 200 patients with advanced cancer were treated with this early, but hopeful therapy. Thus far, it appears to be most active in kidney cancer and melanoma. As with any new therapy, much fine tuning remains to be done. We are working to lessen toxic effects and to develop more efficient, less expensive ways to deliver the therapy. New trials have also started with tumor-infiltrating lymphocytes, which have much greater, more specific capacity for killing tumor cells than LAK cells in laboratory studies.

• Monoclonal antibodies, designed to recognize and latch onto specific markers on the surface of cancer cells, can in the laboratory ferret out oncogenes and their products. Now, with treatment in mind, streamlined techniques are being developed to bind monoclonals securely to toxins or radioactive compounds so they can be carried directly to cancer cells while sparing normal tissues. A bacterial toxin coupled to a monoclonal antibody is now in clinical trials in patients with widespread ovarian cancer.

Monoclonals are being used for diagnosis with radioactive labels to create images of tumors, and monoclonals are also being tested to treat adult T-cell leukemia, colon cancer, and small-cell lung cancer (where they are directed at a growth factor, bombesin).

• Recently also, the key enzymes and systems involved in drug resistance--the main cause of chemotherapy treatment failure--have been found. (There seem to be links between drug resistance, the cancer transformation process, and the mechanisms cells use to protect themselves from toxins.) The NCI has added drug-resistant human cells to the initial screening for effective anticancer drugs.

The NCI drug discovery program has also begun to screen drugs in human cancer cell lines, expecting to identify agents active against the same tumor type in patients. Meantime, five new promising agents enter the clinic this year, plus one new drug that is promising against AIDS.

In another direction, knowledge of oncogenes and the potential for turning them on and off has opened up a new area of cancer prevention and control, now a major program. We know that the cancer process begins with exposure to an initiator, followed by multiple exposures to one or more promoters. Initiators and possibly promoters can turn on or activate an oncogene. Initiators include chemicals, cigarette smoke, viruses, and radiation. They can alter the DNA of a cell and start it on the journey to cancer. Tumor promoters include such agents as certain components of diet, hormones, or certain compounds found in cigarette smoke. Promoters do not cause cancer directly, but facilitate the process.

Recently, research has focused on how promoters work and how to reverse these later stages of cancer development. Because most people have been exposed to initiators, the best way to prevent cancer would be through adding antipromoters or removing promoters.

New evidence bolsters this approach: lung cancer incidence among white men continues to decrease as a result of smoking cessation. Meantime, a nationwide, community-based smoking cessation program for heavy smokers--the group at highest risk of cancer--was added this year to our ongoing studies to find ways of reducing smoking. Data from two recent studies strengthen the evidence for the association of passive smoking with lung cancer risk.

The NCI prevention studies in humans are looking at the effect of reducing a risk factor, such as fat in the diet, or adding an antipromoter, such as vitamin A derivatives. An extensive research program on diet and cancer is probing the role of specific foods and food groups to find ways of preventing cancer. Some nutritional factors, such as fat, are thought to promote cancer, while others, such as fiber, are thought to inhibit some cancers. A major feasibility study is under way to determine whether low-fat diets can reduce breast cancer incidence in women who are at high risk for the disease. This year, 300 women enrolled in the pilot study.

Investigators have now identified many roles played by an important enzyme--protein kinase C. It is involved in normal cell growth, but can also bind with tumor promoters and play a part in drug resistance. New information about this powerful catalyst could lead to the design of antipromoters and methods to prevent drug resistance in cancer patients.

The role of viruses in a number of cancers has been well established. Researchers at NCI discovered the HTLV family of viruses related to leukemias and lymphomas. They found that HTLV-III/LAV, also known as HIV, is the cause of AIDS. This year, the same group discovered a new human herpes-like virus--HBLV. Studies are under way to see if it plays a role in lymphoma and other abnormalities of immunity.

Shortening the line between laboratory and clinic has brought rapid results in AIDS research. For example, scientists discovered that the several controlling genes of HTLV-III/LAV trigger the AIDS virus to replicate at a great rate, and when those genes are removed, the virus is incapable of growing. This finding suggests that drugs that prevent the genes from working should also keep the virus from growing. Meantime, the drug azidothymidine (AZT)--first developed to be an anticancer drug--was found to have antiviral activity against the AIDS virus in the laboratory. Early results in some AIDS patients at NCI showed positive benefits. A multicenter clinical trial confirmed the findings of NCI. The drug is now distributed to selected AIDS patients and will soon become commercially available.

The National Cancer Act gave us the mandate not only to support basic research, but to apply the results of that research. We have been building a program with all the elements necessary to carry out this mandate. Today, we can say our role has changed from supporting basic research and <u>building</u> a pipeline for carrying research into practice--to supporting basic research and <u>using</u> the pipeline. The network or pipeline crosses the country to speed the transfer of advances from basic and clinical research to the community at large.

The network includes cancer centers; cooperative groups of researchers; and the Community Clinical Oncology Program and Cooper-

ative Group Outreach Program which link community-based physicians with cancer centers and the cooperative groups for participation in clinical trials. Programs for improving cancer control in minority populations continue to expand.

Lately, the network has grown through cooperation with state and local governments and private industry. A major communications network ties the whole system together. Physician Data Query (PDQ), a computerized database, makes readily available the latest information on cancer treatments and clinical trials. The Cancer Information Service (toll free 1-800-4-CANCER) answers cancer-related questions from the public, cancer patients and their families, and health professionals.

We are using the network to help us meet our goal for the year 2000. We now believe by applying the knowledge we have at hand for cancer prevention and treatment, it would be possible to cut the annual cancer death rate by as much as 50 percent by the year 2000. Details of plans to reach this goal were released this year and call for cooperation from the public and private sectors. Meantime, as we work towards the goal, our new understanding of the cancer cell continues to offer dramatic, new opportunities for its control.

Mr. Chairman, the Fiscal Year 1988 budget request for this Institute is $1,811,117,000. In addition, the Administration also proposes a policy of appropriating the total NIH allowance for research project grant commitments at the time that they are incurred. This approach to grant funding would inform the research community of the total funds available for continuation costs. In accordance with this proposal, the FY 1988 request includes $508,294,000 for future year commitments associated with competing project grants awarded in FY 1988. I will be pleased to answer any questions you might have.

Statement of Dr. Anthony S. Fauci

The National Institute of Allergy and Infectious Diseases (NIAID) stands at the forefront of scientific research on a wide range of diseases that not only affect the quality of life but threaten the very existence of millions of people in the United States and throughout the world. While the basic and clinical research that is conducted and supported by this Institute has dramatically improved the health of all Americans, and has the potential for similar benefits in the developing world, additional challenges continue to emerge. The present epidemic of sexually transmitted diseases, the development of drug resistance in malaria, the large number of people who suffer from chronic, debilitating, immune-mediated diseases, and the appearance of new or newly recognized diseases--of which the acquired immunodeficiency syndrome (AIDS) is the most devastating--are just some examples of the grave medical problems we face.

We are confident that the extraordinary amount of basic scientific knowledge that has been amassed in recent years and continues to accumulate can and will continue to meet the challenges of disease. The NIAID places great emphasis on basic research in immunology and infectious diseases both in our own intramural

laboratories and at the many universities and research centers where support is provided through our extramural programs.

Immunology is the study of the basic mechanisms of function of the immune system. Through basic studies in immunology we can understand the processes at work in hypersensitivity diseases such as allergies and asthma, in congenital and acquired immunodeficiency diseases, in autoimmune conditions, and in rejection of organ transplants. Furthermore, immunology serves as the foundation for the development of agents and procedures that can enhance the immune system's defense against infectious microorganisms, restore damaged immune function, and suppress the immune system when it reacts inappropriately.

Over the past decade the field of immunology has surged forward. Ten years ago we knew that cells had specific functions; five years ago we knew that they communicated among themselves through an intricate and interlocking network; now we are dissecting out the mechanisms of this communication at the molecular level. This revolutionary expansion of knowledge would not have been possible without the new technologies of molecular genetics, cell and gene cloning, and monoclonal antibodies.

The most fundamental characteristic of the immune system is its ability to recognize and respond to foreign substances, called antigens, in a highly specific manner. This recognition function is carried out by receptors on the surface of the two major immune competent cells, the B and T lymphocytes. It is this recognition capability that allows the body's immune system to mount a specific response against outside and inside invaders that are harmful to the body.

For some time we have had a firm understanding of the mechanisms whereby B lymphocytes recognize foreign antigens and respond by producing protective antibodies. Only recently, however, particularly during the past year, have scientists been able to fully delineate the nature of the process of antigen recognition by the critically important T cells. Understanding this process has had major implications for our understanding of the fundamental mechanisms of autoimmune diseases, transplantation rejection, and graft versus host reaction, as well as a variety of other pathological processes.

This basic approach of analyzing the mechanisms of immune function is crucial to our efforts to understand and combat a number of diseases of importance to humankind. Nowhere is this concept better illustrated than in the rapidly unfolding story of AIDS. The foundation we have constructed in immunology and microbiology has allowed for the rapid advances that have been made in understanding and potentially thwarting this devastating disease.

When the first AIDS cases appeared in the United States in 1981, immunology and virology had, fortunately, reached a degree of sophistication that enabled us to identify, isolate, and characterize the causative agent within a remarkably short time. At the NIAID, we were able to quickly define precisely how the AIDS virus affects the immune system. In collaboration with the National Cancer Institute (NCI), we were able to design therapies that could interfere with the disease process and restore the immune response, and to build a strategy for vaccine development.

The fact that approximately 1.5 million Americans are already infected with the AIDS virus and 270,000 individuals will have developed AIDS by 1991 lends particular urgency to our research efforts. The NIAID has become the lead Institute at the NIH for coordinating, conducting, and supporting AIDS research. During the past year the NIAID established the extramural Acquired Immunodeficiency Syndrome Program, which is awarding grants and contracts for basic research in the virology, molecular biology and immunopathogenesis of the AIDS virus, for studies of the epidemiology and natural history of the disease, for vaccine development, and for the development and clinical evaluation of therapeutic agents and procedures.

In July 1986 we announced the award of contracts for 14 AIDS Treatment Evaluation Units (ATEUs) and established 5 additional units at the beginning of FY 1987. We have enrolled clinicians, virologists, statisticians and other specialists in a nationwide collaborative research network for the careful evaluation of potential AIDS therapies. Both in these Units and in our intramural program we are evaluating therapies directed at (a) suppressing the AIDS virus, (b) reconstituting the underlying immunodeficiency, and (c) treating the various opportunistic infections and neoplasms that occur in persons with AIDS. Encouraging results of studies using azidothymidine (AZT) in AIDS patients with Pneumocystis carinii pneumonia have prompted us to undertake a series of studies of AZT in different patient populations.

At the NIH Clinical Center, we are expanding our studies in identical twins, treating each AIDS patient with a combination of AZT to suppress the virus, and bone marrow and lymphocytes from his healthy brother to reconstitute the immune system.

In order to promote innovative approaches to targeted drug development, we have enlisted teams of outstanding investigators from academia and industry in our multi-disciplinary, multi-institutional National Cooperative Drug Discovery Groups. Similar research teams will be assembled to develop creative and targeted vaccine approaches in our National Cooperative Vaccine Discovery Groups. Evaluation of candidate AIDS vaccines in humans will be the responsibility of the NIAID, largely through our extramurally funded Vaccine Evaluation Units. In this regard, we are optimistic that Phase I clinical trials in humans, to assess safety of a candidate vaccine, may begin in the United States by 1988. Despite this rapid progress, even if a vaccine candidate does prove to be safe and effective, we do not anticipate that an AIDS vaccine will be available for widespread use until well into the 1990s.

In the NIAID intramural program, we have intensified our efforts to further define the immunopathogenesis of AIDS; that is, the process by which the virus destroys the body's immune system. We were among the first to recognize that AIDS patients have reduced numbers and function of a selective subset of T lymphocytes, known as helper/inducer cells or T4 cells, that express a molecule known as CD4 on their cell surfaces. CD4 acts as a receptor that binds the AIDS virus to the cell and allows it to penetrate and enter the cell.

At the NIAID, we have delineated the events that transpire when cells latently harboring the AIDS virus are challenged with various stimuli and then produce virus particles. This research may help to

explain the process whereby a latent or low level infection with the AIDS virus becomes active and productive, and can thus progress to full-blown disease. We were among the first to detect direct AIDS virus infection of cells in the brain, the probable cause of the neurological complications commonly seen in AIDS patients. NIAID scientists have engineered a recombinant vaccinia virus by inserting AIDS virus genes into a vaccinia vector that expresses virus envelope proteins. The recombinant vaccine, which has produced an antibody response when inoculated into experimental animals, is an important research tool as well as a possible AIDS vaccine candidate. These are but a few examples of the rapid strides that have taken place in AIDS research over the past year.

The design of safe and effective therapies and vaccines against any disease rests on carefully designed and executed investigations. Our present extensive knowledge of hepatitis emanates from the painstaking, step-by-step accumulation of information over many years. Five different hepatitis viruses are now known: A, B, non A-non B (blood-borne), non A-non B (water borne), and Delta.

At the NIAID the genome of the hepatitis A virus, the cause of "infectious" hepatitis, has been cloned and sequenced, and this will contribute to our understanding of the molecular basis of virulence and attenuation. The NIAID has produced a live attenuated hepatitis A vaccine that is now undergoing final preclinical testing and will be in clinical trials very soon.

The plasma-derived hepatitis B vaccine that has been in use for several years was developed with NIAID support. We and other researchers have pursued alternative, cheaper methods of producing hepatitis vaccines, and a recombinant vaccine was recently licensed. The chimpanzee and woodchuck animal models for hepatitis delta infection, developed by the NIAID, will prove invaluable in further research on this agent, which causes severe disease worldwide. Blood-borne non A-non B hepatitis accounts for at least 90 to 95 percent of transfusion-associated hepatitis. Expertise acquired in the study of other hepatitis viruses has aided in the development of methods for inactivating non A-non B and other hepatitis viruses in blood products. Finally, we are actively engaged in research on water-borne non A-non B hepatitis virus, which causes widespread epidemic disease in many areas of the world.

Today, opportunities are burgeoning for the development of new and improved vaccines for the entire spectrum of infectious agents--bacteria, viruses, fungi, and parasites--that affect Americans as well as people in developing nations. Recombinant DNA technology, the production of monoclonal antibodies, nucleic acid sequencing, and peptide synthesis have opened the way for producing highly purified and specific antigens that can be incorporated into vaccines.

The Committee has expressed an interest in research on new, improved vaccines for pertussis, or whooping cough. The present vaccine, though highly efficacious, can occasionally produce adverse side effects that in rare instances lead to permanent brain damage or death. Last year, I reported to you that NIAID scientists had cloned and sequenced the pertussis toxin gene, the major protective antigen that also appears to be responsible for side effects. Through genetic engineering, these scientists have recently produced pure

subunits of the bacteria that evoke an immune response when tested in an animal model. It is possible that these subunits may form the basis of a non-toxic pertussis vaccine.

In summary, these major advances in the prevention and treatment of a number of important diseases underscore our primary message: that continuing and intensive commitment to basic and clinical research in immunology and infectious diseases is essential to our ability to continue to meet and master the challenges of old and new diseases.

Mr. Chairman, the 1988 budget request for this Institute is $815,315,000. In addition, the Administration also proposes a policy of appropriating the total NIH allowance for research project grant commitments at the time that they are incurred. This approach to grant funding would inform the research community of the total funds available for continuation costs. In accordance with this proposal, the FY 1988 request includes $264,213,000 for future year commitments associated with competing project grants awarded in FY 1988. I will be pleased to answer any questions you might have.

Statement of Dr. Harald Loe

Mr. Chairman. There continues to be much excitement and progress in dental research, with important implications for the oral health of all Americans. In the spring of 1986 the Institute completed the clinical phase of a major survey of adult oral health in America. Twenty-one thousand individuals were examined in workplaces and senior centers throughout the country. With the children's survey conducted in 1979-80 we now have good data on the dental health of approximately 150 million Americans between the ages of 5 and 80+ years. In one sentence, the findings indicate that the dental health of Americans is showing continuing improvement.

The adult survey showed that only 4 percent of employed Americans were missing all their teeth. As a matter of fact, 50 percent of these adults have lost an average of only one tooth. This is a significant drop in tooth loss when compared to a 1971-1974 survey. Indeed, we have calculated that the savings in the cost of dentures for the period from 1974 to 1981 alone amount to some $5.5 billion. Unfortunately, Americans 65 and above do not show the same improvement. Forty-two percent of this older-aged group are edentulous.

In the case of caries, the adult survey found little difference between younger and older adults. Both groups continue to suffer from tooth decay on the crowns of teeth. However, caries affecting tooth roots was more extensive in older persons. The majority of working adults and older persons showed signs of periodontal diseases, with increasing prevalence and some worsening of symptoms with age.

In summary, from a nationwide perspective, there appears to be a significant improvement in oral health in America. We know from the children's survey that there has been a dramatic downturn in tooth decay. Today, over a third of children are growing up without cavities; without a single filling in their mouths. We know from the adult survey that toothlessness has been almost eliminated in the middle years, but that adults continue to develop tooth decay and periodontal diseases which carry over into

older age. Clearly, the worse problems are in the older segments of the population: edentulousness, caries, periodontal diseases, with all the attendant pain and suffering, plus the need for dental services. Our epidemiologists are continuing to analyze the data looking for regional differences and noting how oral health status varies with age, sex, income, and other variables.

For some time the Institute has emphasized the importance of focusing on adults and older persons, not only because the data clearly show the existence of serious oral health problems, but also because of the increase in the numbers of these age groups in the population. The NIDR is primed to take on the challenge of ensuring that in the future neither children nor adults need ever lose a tooth to disease--nor suffer needlessly from pain or problems affecting the oral tissues. The adult and children's surveys have been major steps toward that goal, allowing the Institute to establish firm baselines for disease prevalence and helping to shape research priorities.

High among those priorities is a new initiative the NIDR is undertaking with the National Institute on Aging and the Veterans Administration to develop Oral Health in Aging Research and Training Centers. For the past two years the three agencies have worked together to define research needs and resources related to oral health in aging. Now we are developing a joint Request for Applications (RFA) for research and training grants that would engage investigators at VA hospitals and academic health centers in collaborative research activities. We foresee real cost-saving benefits and research progress from a program that can draw upon the resources and talents of investigators who can address questions of concern to all three agencies.

While we are not limiting the themes that investigators may address in relation to oral health in aging, we have singled out some areas of particular importance. These include nutrition and oral/general health, chronic pain in older persons, and research on oral health promotion and disease prevention tailored to the needs of older persons.

As far as the NIDR is concerned, these research areas emphasize the increasing movement of dental research into areas of prevention. We plan to follow through with a multi-pronged approach: First, we are going to increase efforts to identify individuals at most risk for disease. Second, we are emphasizing the development of ways to prevent or reverse pathology. For example, researchers are experimenting with new fluoride-calcium phosphate mouth rinses which could be used to rebuild tooth enamel in individuals susceptible to tooth decay. The option of a caries vaccine is still open as well, with investigators exploiting molecular biology techniques to develop several candidate vaccines that are undergoing testing.

Third, the Institute is increasing behavioral and social science research to design and evaluate ways to encourage people to adopt and maintain appropriate oral care practices. Middle-aged adults, the 30-to-60 year-olds, are an especially challenging target group. These men and women are generally healthy, active and working. We want to make it clear to them--through oral health promotion and demonstration research activities--that no matter what their past dental history has been, they can adopt preventive measures now to help ensure sound teeth and oral tissues for the rest of their lives. In that regard, the Food and Drug Administration has now approved the first antimicrobial mouth rinse that dentists can prescribe to reduce disease-causing

bacteria in the mouth. Such rinses will be especially useful for susceptible patients, including individuals who cannot maintain adequate oral hygiene levels through simple mechanical means.

Still other interventions may come to the aid of patients with advanced periodontal diseases. As the disease progresses, the bacteria attack the fibers and the bone supporting the tooth so that the tooth eventually loosens and falls out. Now, new lines of research suggest that it may be possible to restore the tooth's attachment by rebuilding the supporting tissues. These techniques depend on allowing the preferential migration of periodontal ligament cells to the site. These cells have the potential of generating new bone, new fibers, and new hard tissue covering the root of the tooth so that the tooth regains its firm anchorage in the jaw.

These advances in regeneration research, in vaccine testing, and other clinical developments, would not have been possible before the biotechnology revolution. Today dental researchers are using genetic probes and monoclonal antibodies to track organisms and molecules of interest in oral health and disease. These techniques have also been used to clone genes essential to the development of tooth enamel. The expertise is now available to go the whole way: Find and clone the genes regulating the formation of all the dental hard tissues. These studies should provide insights into genetic disease, allow synthesis of manmade materials that simulate normal tooth substance, and, most importantly, provide a model for understanding the regulation and timing of genetic events that govern normal human development.

Complementing the molecular biological methods are new "high technology" diagnostic and treatment tools. These include magnetic resonance imagery, currently employed in experimental studies of oral soft tissues and temporomandibular joint disorders, and such hard-tissue-detecting systems as digitized subtraction radiography and nuclear medicine. The latter techniques are superior to standard X-rays because they can detect far more subtle changes in bone, enabling early detection of periodontal disease; they may be equally valuable for the early diagnosis of osteoporosis and other bone-wasting diseases. Last fall the NIDR sponsored a unique international workshop to bring together experts in physics, engineering, computer science and dental research to discuss the state of the art of these new approaches. In addition, the NIDR can cite instances in which the combination of molecular methods and new instrumentation has accelerated the acquisition of new knowledge and led to immediate clinical applications.

A prime example is a new method of making human monoclonal antibodies. Such human antibodies are invaluable in treating disease in which repeated administration of the disease-fighting molecules is necessary, or in which the patient reacts adversely to antibodies generated from other animal species. NIDR scientists found that they could take blood from normal volunteers, extract the antibody-making cells, incubate them with a specific antigen, and then use a special laser-beam cell sorting machine to select out just those cells that make antibodies to that antigen. The investigators are exploring applications of the technique to make antibodies to attack the human immunodeficiency virus (HIV) that causes AIDS.

Another case of high-powered techniques leading to important clinical applications concerns basement membrane research. Basement membranes are thin sheets of extracellular material that

underly epithelial tissues and surround blood vessels, nerves, and muscle cells. NIDR scientists have isolated and cloned molecules in basement membrane that play a key role in embryonic development, in wound healing, in nerve regeneration, and in certain disease processes, notably cancer. It appears that the ability of a tumor to spread to other tissues (metastasize), depends on the ability of cells within the tumor to breach the basement membrane that surrounds blood vessels. In the NIDR test, a thin gel of reconstituted basement membrane is placed atop a filter separating two compartments. Normal and benign tumor cells cannot breach the barrier, while malignant cells cross the membrane in numbers proportional to their invasive potential. The assay is now being used to classify a variety of human tumors, including Kaposi sarcoma cells from AIDS patients, with the intent of developing drugs to block invasiveness.

These two examples illustrate how NIDR scientists have been quick to apply their own newly developed techniques to the study of AIDS, augmenting the growing efforts of the Institute to meet the challenge of this deadly disease. In other research, NIDR immunologists have extended their studies of monocytes and have shown that these cells may harbor both HIV and cytomegalovirus, a herpes virus which can cause serious infections in AIDS patients. Clinical collaborations underway are exploring ways to restore immune function as well as combat the virus. This year salivary gland researchers have begun important studies of early-stage AIDS patients. Of special interest are antibacterial and antifungal factors found in saliva which normally protect against oral infections, such as candidiasis, often seen in AIDS patients. In related studies, NIDR investigators are testing the effectiveness of antimicrobial mouth rinses to treat oral infections in AIDS patients. If unchecked, these conditions can spread to the respiratory and digestive systems causing serious illness or death.

So far we have emphasized new directions in prevention, appropriate target groups at risk for disease and clinical applications. In conclusion, the Institute is pleased to report progress on several ongoing initiatives. The first concerns the Institute's Request for Applications for Research Centers in Oral Biology. This RFA grew out of the request by Congress for a report, reflecting the views of the dental community, of NIDR plans for the use of center and other large grant mechanisms. It is gratifying to announce that 15 applications for these broadly based research centers were received by the December 1986 deadline (including responses from all five existing Dental Research Institutes and Centers). The NIDR has developed an expedited peer review process and hopes to make several awards by the summer of 1987.

Continued expansion of NIDR thematic centers was also indicated in the NIDR report to Congress, and, following an international workshop on restorative materials last fall, it was agreed that centers bringing together clinicians and basic materials research scientists could facilitate the development and clinical use of new dental materials and methods. Such centers would also attract new investigators to replenish a diminishing pool of investigators in the field.

Finally, the NIDR is pleased to report that it has been able to maintain the orderly expansion of its Dentist-Scientist Award program to develop a new generation of clinical investigators in dental research.

The commitment of the NIDR to an ever-widening range of oral health problems that can occur from birth to advanced age is a reflection of the maturity of dental research; an ability to utilize the whole spectrum of biomedical techniques, from molecular biology to epidemiological surveys, to clinical and field trials, to address oral health issues. As research progresses we expect to build a future in which a concerned and informed public and profession adopts all the best that dental research has generated to prevent disease and preserve the oral tissues over an ever-lengthening lifetime.

Mr. Chairman, the FY 1988 budget request for this institute is $144,081,000. In addition, the Administration also proposes a policy of appropriating the total NIH allowance for research project grant commitments at the time that they are incurred. This approach to grant funding would inform the research community of the total funds available for continuation costs. In accordance with this proposal, the FY 1988 request includes $36,033,000 for future year commitments associated with competing project grants awarded in FY 1988. I will be pleased to answer any questions you might have.

Biography of Dr. Harald Löe

Harald Löe, D.D.S., Dr. Odont.
Director, National Institute of Dental Research

July 19, 1926, Steinkjer, Norway

Education: Oslo University, Norway, D.D.S., 1952; Dr. Odont., 1961

Professional History: 1952-1955, Instructor in Operative Dentistry, School of Dentistry, Oslo University, Oslo. 1956-1962, Research Associate, Norwegian Institute for Dental Research, Oslo. 1957-1958, Fulbright Research Fellow and Research Associate, Department of Oral Pathology, University of Illinois, Chicago. 1959-1962, University Research Fellow, Oslo University, Oslo. 1960-1962, Associate Professor, Department of Periodontology, University of Illinois, Chicago. 1959-1962, University 1960-1962, Associate Professor, Department of Periodontology, School of Dentistry, Oslo University, Oslo. 1966-1967, Visiting Professor of Periodontics, Hebrew University, Jerusalem. 1962-1972, Professor of Dentistry and Chairman, Department of Periodontology, Royal Dental College, Aarhus. 1971-1972, Associate Dean and Dean-elect, Royal Dental College, Aarhus. 1972-1974, Professor of Dentistry and Director of the Dental Research Institute, University of Michigan, Ann Arbor. 1974-1982, Dean and Professor of Periodontology, School of Dental Medicine, University of Connecticut, Farmington.

Professional Organizations: American Academy of Periodontology; American Association for the Advancement of Science; American Association for Dental Research; American Association of Dental Schools; American College of Dentists; American Dental Association; Connecticut State Dental Association; Danish Dental Association; Federation Dentaire Internationale; International Association for Dental Research; Institute of Medicine, International College of Dentists; Scandinavian Association for Dental Research; Sigma Xi, the Scientific Research Society.

Honors, Awards: Honorary doctorate degrees from the University of Gothenburg, Sweden, 1973; the Royal Dental College, Denmark, 1980; the University of Athens, Greece, 1980; the Catholic University of Leuven, Belgium, 1980; the Georgetown University School of Dentistry, Washington, D.C., 1983; the University of Lund, Sweden, 1983;, the University of Bergen, Norway, 1985; and the University of Maryland, U.S.A., 1986; Alpha Omega International Dental Fraternity Achievement Medal Award, 1986; Goldstein Lecture, Emory University, 1986; Benjamin J. Robinson Lecture, University of Maryland, 1985; Alfred C. Fones Medal for Outstanding Achievement in the Service of Humanity, 1984; International Award of the Friends of the University of Connecticut School of Dental Medicine, 1983; Lister Hill Memorial Lecture, University of Alabama, 1983; Daniel F. Lynch Award, Dental Society of Greater Waterbury, 1983; International Lecturer of the Year Award, Academy of International Dental Studies, 1983; Gold Medal, University of Ghent, 1982; Centennial Award, University of California School of Dentistry, 1982; Award of Merit, Hartford Dental Society, 1982; Irving Glickman Memorial Lecture, Tufts University, 1979; William J. Gies Award, American Academy of Periodontology, 1978; Arthur Merritt Memorial Lecture, Baylor University, 1977; Certificate of Achievement, Connecticut Society of Periodontists, 1976; Massachusetts Dental Society International Award, 1973; honored by Her Majesty the Queen of Denmark (Knight of Danebrog), 1972; American Society of Preventive Dentistry International Award, 1972; International Association for Dental Research Award for Basic Research in Periodontics, 1969; Aalborg Dental Society Prize of Honour, 1969; Erik Berg Foundation Prize of Honor, 1965; Ingv. Stokke Prize for Outstanding Dental Research, 1959; Norwegian Dental Association 75th Anniversary Prize, 1959; honorary memberships in several professional societies.

Statement of Dr. Claude Lenfant

I welcome this opportunity to report on recent research advances in programs of the National Heart, Lung, and Blood Institute (NHLBI) and on new directions for further progress toward the national goal of maintaining and improving the health of the American people.

Because 1988 marks our Institute's 40th anniversary, I am gratified to present some objective measures of progress; over the last two decades the death rate from coronary heart disease has declined 40 percent and the death rate from stroke has declined 52 percent. In contrast, deaths from lung diseases continue to rise. One person in 20 suffers from chronic obstructive pulmonary disease, and we cannot view the future with optimism unless smoking declines significantly. Especially noteworthy among advances are the contributions of basic science research to our knowledge of the causes of heart, lung, and blood diseases. This knowledge provides a basis for further advances in the diagnosis and treatment of clinical problems. In recent years, improvements also have been made in prevention and education programs for practicing physicians and for the general public to influence beneficial health-related behaviors.

The 1986 Biennial Report of the Director, NIH, which includes highlights of some major advances in NHLBI programs, provides ample evidence of a symbiotic relationship between the basic and clinical

aspects of our programs. Results of our increasing emphasis on basic research are now being reflected in the clinical initiatives highlighted below. These achievements have resulted from investigator-initiated regular research grants, the Institute's Centers of Research program, research contracts, and our own intramural research laboratories. In addition, clinical findings often catalyze basic investigations and vice versa. Many of these interactions promise health benefits with a potentially lower cost.

An acute febrile immunologic illness, Kawasaki syndrome, affects very young children. About 20 percent of patients develop coronary artery aneurysms, which account for the 0.5 to 2.8 percent fatalities. The syndrome is now the leading cause of acquired heart disease in young children in this country, with an incidence exceeding that of rheumatic fever and viral myocarditis. I am pleased to report that a recent multicenter randomized clinical trial has demonstrated the efficacy of intravenous gamma globulin in preventing the coronary aneurysms. Consequently, the investigators now recommend that gamma globulin therapy be introduced as soon as possible after the diagnosis of Kawasaki syndrome.

About 60 percent of aortic valve replacements and 20 to 30 percent of mitral valve replacements in adults are a consequence of stenosis, or narrowing of the valve. Balloon catheters, successfully used since 1982 to treat children with heart valve stenosis, now are being used increasingly to treat adults with aortic or mitral valve stenosis. Because operative mortality for valve replacements ranges from 3 to 15 percent, this use of "balloon valvuloplasty" is a very promising alternative to surgery. Moreover, it has been used successfully in patients too ill to undergo surgery, has a shorter convalescent period, and offers the potential of ultimately reducing health care costs for these patients. An Institute program will evaluate the efficacy of balloon valvuloplasty in patients with severe valvular stenosis.

A major therapeutic "payoff" of fundamental research is resulting from the Nobel prize-winning work of Drs. Brown and Goldstein, referred to in last year's testimony. Currently in progress are relevant clinical studies of new cholesterol-lowering compounds that diminish cholesterol synthesis by liver and other cells. This diminished synthesis leads to greater activity of lipoprotein receptors, increased cholesterol degradation, and reduced levels of blood cholesterol. This approach to therapy is very promising and is expected to reduce the risk of early death from atherosclerosis in patients with familial or nonfamilial forms of elevated blood cholesterol.

Among lethal genetic diseases, cystic fibrosis is the most common in the Western world. It affects approximately one in 2,000 infants in this country and it is usually fatal in young adults because of pulmonary complications. About a year ago, scientists not only localized the gene for cystic fibrosis on a specific (seventh) chromosome, but also identified markers to establish the presence of the gene in members of families in which a child has the disease. This latter finding is now being used clinically to predict whether an expected child is likely to have cystic fibrosis if a couple already has a child with the disease. I also wish to underscore that the continued progress in management of the pulmonary complications

of cystic fibrosis patients is resulting in greater longevity and better quality of life for these patients.

Over the years, I have frequently alluded to truly dramatic progress in the treatment of neonatal respiratory distress syndrome and its impact on survival of premature infants. It is noteworthy that this advance in therapy is a spin-off of basic research on the pulmonary surfactant that maintains the patency of the normal lung. A recently completed controlled trial demonstrated that human surfactant, administered at birth to very premature infants, reduced the severity of respiratory distress syndrome and in some instances prevented it. This finding is expected to reduce significantly the cost of caring for these infants in the intensive care unit.

An advance in basic research with potential therapeutic value is the development of technology which can replace a missing gene, or modify the expression of an abnormal gene, when either is associated with the development of disease. Both sickle cell disease and Cooley's anemia (beta thalassemia) are diseases of infancy that result from abnormalities of the globin portion of hemoglobin. It is of considerable interest that a recently identified retroviral vector facilitates the insertion of a globin gene into cells of the bone marrow that are precursors of the red blood cell. These findings, from animal studies, offer the promise of normal synthesis of globin in the red blood cells of patients with sickle cell disease and with Cooley's anemia.

Patients with Cooley's anemia must undergo repeated transfusions of red blood cells to correct their severe anemia. This exposes them not only to the risk of infection from transfused blood but also to serious toxic effects that result from excess iron introduced by the transfused red cells. When fresh blood is used, patients may become sensitized to the white blood cells and platelets in the transfused blood. Although these cells may be reduced or eliminated by a process of freezing and thawing, the procedures also reduce the number of red blood cells available for transfusion. New techniques have now been developed to filter the blood and remove the white cells and platelets, increase the yield of red blood cells by about 36 percent, reduce the cost per unit, and decrease the frequency with which transfusions are needed. As a result, there are notable cost savings to the patient.

A recently reported clinical trial of prophylactic treatment of infants with sickle cell disease has shown that daily administration of oral penicillin can reduce the incidence of septicemia caused by the bacteria, streptococcus pneumoniae, which in these children is a frequent cause of death. In fact, the trial was terminated 8 months early because the placebo group experienced three deaths from infections while the penicillin-treated group had no deaths from pneumococcal infection. These findings support the possibility of preventing the 150 to 180 deaths that occur each year in the U.S. among sickle cell infants who contract this infection.

Problems associated with clotting disorders are reflected in Institute programs addressed to heart and lung diseases as well as to blood diseases and resources. Indeed, clotting disorders underlie many of the most serious and common diseases in this country: myocardial infarction, thrombophlebitis, pulmonary embolism, and thromboembolic stroke. Basic research on the

mechanism of blood clot dissolution has resulted in the development of fibrinolytic agents now being used with dramatic results in the treatment of myocardial infarction. Potential therapeutic use has also been reported in cases of deep venous thrombosis and pulmonary embolism. Because accurate diagnosis of pulmonary embolism is so important prior to implementation of therapy, the Institute is sponsoring a multicenter clinical evaluation of the efficacy of the two most commonly used imaging techniques, ventilation-perfusion scans and pulmonary angiography. It also appears that the application of basic research technology may lead to a new and innovative approach to diagnosis, as illustrated by the recent development of a monoclonal antibody specific for identification of fibrin clots. If successfully applied in a clinical setting, this technique would provide a minimally invasive and extremely sensitive diagnostic procedure for pulmonary embolism.

Another Institute-wide focus of research is acquired immunodeficiency syndrome (AIDS). The progression of results from basic research to their medical applications is especially well exemplified by the advances made since 1982, when the first cases of transfusion-related AIDS were described. By the summer of 1985, virtually all blood collecting facilities in this country were employing HIV-antibody screening procedures to prevent spread of the virus through blood transfusion. With the introduction of such screening procedures, the current risk of HIV infection through blood transfusion is approximately one in a million in this country. Nevertheless, some potential donors who carry the virus do not have detectable antibody to the agent, and their blood could be approved for transfusion. To determine the magnitude of this problem, the NHLBI has initiated a program to evaluate the effectiveness of current HIV antibody screening procedures in blood donors. Because the absence of detectable antibody to the virus does not conclusively prove that a donor is free of virus, the Institute is also sponsoring the development of tests to detect the virus itself or certain of its components.

This year, the Institute will undertake a new direction in its AIDS program through a study of its pulmonary complications. Pneumocystis pneumonia is the predominant pulmonary complication in patients with AIDS, but other important pulmonary complications are tuberculosis, interstitial pneumonitis, and pneumonia caused by pyogenic bacteria. The study is examining the types, incidence, and clinical course of pulmonary complications in patients with AIDS, in patients with AIDS-related complex, and in healthy carriers of HIV virus.

Serious organ-system damage resulting from the immunodeficiency associated with the AIDS virus has been reported for the pulmonary, renal, central nervous, and gastrointestinal systems, but not the cardiovascular system. Recent findings, however, suggest a possible involvement of the heart in AIDS. Three patients with recurrent AIDS infection have been found to have developed a rapidly fatal cardiac illness described as dilated cardiomyopathy. This is a finding which we will follow closely.

An important approach to problems associated with transfusion-transmitted blood diseases, which include hepatitis as well as AIDS, is adequate professional and public education. This requires a two-pronged goal: an educated pool of healthy donors, and a delivery

system that uses donor blood only when absolutely necessary. To these ends, the Institute has supported demonstration and education programs, and is planning a national educational effort for the near future.

The advances I have described illustrate the ever-rewarding and intriguing interaction which couples fundamental research to clinical study. This interaction has yielded noteworthy new information toward the better understanding, treatment, and prevention of cardiovascular, lung, and blood diseases which is benefitting the health of Americans.

Mr. Chairman, the FY 1988 budget request for the National Heart, Lung, and Blood Institute is $1,274,387,000. In addition, the Administration also proposes a policy of appropriating the total NIH allowance for research project grant commitments at the time that they are incurred. This approach to grant funding would inform the research community of the total funds available for continuation costs. In accordance with this proposal, the FY 1988 request includes $452,500,000 for future year commitments associated with competing project grants awarded in FY 1988. I will be pleased to answer any questions you might have.

Statement of Dr. Phillip Gorden

It is a pleasure to appear before you for the first time as a new institute director. I have two basic goals for our Institute. The first is to foster the best basic and clinical research possible and to apply this to solutions for a difficult group of chronic diseases. And the second is to create an atmosphere where the different groups we serve feel at home and that someone really cares about their problem. We represent a broad range of major scientific and medical problems including diabetes and endocrine and metabolic diseases. These include many genetic and orphan diseases. We also include digestive diseases, cystic fibrosis, nutritional disorders, kidney diseases, and diseases of the bladder, prostate, and of the blood. Although this may appear diverse--actually, it is a logical and reasonable mix in which each component enriches the other. Our research is highly investigator-initiated but is also highly focused.

For instance, in type I diabetes a tiny group of cells in the pancreas are selected out and destroyed. We have two excellent animal models to dissect in detail the events leading to cell destruction. The background for the attack may go on for months or years, but an additional trigger is necessary for the destructive event. In the model systems at least two genes must be expressed before cell destruction ensues. Thus, the long sought trigger mechanism for cell destruction may be a certain genetic combination. In the animal models, the disease can be cured by a variety of mechanisms. Cyclosporin is a drug that has been used to cure the disease in animals, and trials have begun in patients with some initial success. This initial optimism, however, must be tempered by the known toxicity of the drug. The major point, however, is that we are on the right track but need a more specific agent. Type II diabetes is an entirely different process. This is the most prevalent form of the disease affecting at least 10 million Americans with very high prevalence rates in native

Americans, Blacks, and Hispanics. Here the focus of research is on the major risk factor for the disease--obesity, with the attendant insulin resistance and defects in insulin secretion. Obesity, which is also a major risk factor for hypertension, lipid disorders, and gallstones, is a major area of research for both our diabetes and digestive disease and nutrition divisions. Much has been learned about what controls how we burn a calorie, familial factors, daily activity, and even long-term caloric expenditure can now be studied directly. Understanding obesity will permit us to prevent it and clearly impact on its major associated problems.

The Diabetes Control and Complications Trial was begun in an attempt to interdict the devastating long-term complications of diabetes which result in blindness, end-stage renal disease, and other vascular complications. The trial is now in its full scale of operation and will enroll 1,400 patients. The goal is to determine whether intensive insulin treatment will forestall or prevent the major complications of diabetes.

The endocrine system of hormones is a major mechanism by which different organs and cells of the body communicate with each other. Thus, hormones regulate fuel metabolism, growth, fertility, and impact on many diseases such as diabetes, osteoporosis, cancer, Alzheimer's disease, and multiple other problems. The Nobel Prize in Medicine or Physiology was awarded in 1986 for work on a hormone-like growth factor. It turns out that the mechanism of action of this growth factor is quite analogous to that of insulin, other known growth factors, and even oncogenes. This is a major area of our research endeavor. Recently, our investigators have discovered a new class of hormone known as inhibin. These hormones are important in the regulation of both ovulation and spermatogenesis and thus have important implications in the study of fertility.

We have previously reported to you about the development of a genetic marker for cystic fibrosis and its chromosomal location. The most recent issue of Science Magazine reports on the rapid progress being made to localize the gene itself so that it's product may be elucidated. Of major importance, in addition, is research on the regulation of "chloride channel," which is thought to be a major cellular defect in cystic fibrosis.

Studies of gut-brain hormones are providing insight into the regulation of food intake, digestion, and important diseases such as peptic ulcer, and disorders of motility. Procedures are being developed to dissolve cholesterol gallstones without surgery. This alternative to abdominal surgery offers the promise of reducing the $2.5 billion annual cost of the 500,000 gallbladder operations performed each year, as well as increasing patient safety.

NIDDK's nutrition research efforts are of fundamental importance to research throughout the NIH. The Institute is applying the most advanced technology to specify normal requirements of human nutrition and to design optimal dietary regimens for the prevention and management of a wide range of diseases and disorders, including obesity.

More than 84,000 Americans are being treated for end-stage renal disease. The largest group in this population are individuals

who have developed kidney disease as a complication of diabetes. This high-risk group is projected to grow to 50 percent of all new ESRD patients within 5 years. To arrest this trend, the Institute plans to pursue an innovative, multifaceted research initiative in kidney disease of diabetes mellitus. This initiative would apply to human studies the results of animal research which suggest possibilities for slowing or preventing the progression of this disease. This initiative has benefited from the enthusiastic cooperation of voluntary health agencies, industry, and both the diabetes and kidney research communities.

We are establishing a Consolidated ESRD Data System to meet vital research needs for better information on the ESRD patient population in the U.S. In collaboration with the HCFA, we have begun a 48-month multicenter clinical trial to study the role of dietary modification in altering the course of chronic renal disease.

More than half of men over the age of 50 will develop symptoms due to prostatic enlargement, and 10 to 20 percent of this group will require an operation for symptomatic relief. A new interdisciplinary initiative has yielded information about growth factors that is expected to offer important insights into the mechanism of prostatic hypertrophy.

Each year, about 300,000 patients in the U.S. require treatment for kidney stones. Prevention of kidney stone formation is now possible in a majority of these patients. The possible savings from this new drug therapy could be as great as $645 million a year.

Diseases of the lower urinary tract and bladder are an important cause of illness and suffering for many Americans. The Institute is initiating a new effort to stimulate research that will provide a science base for further clinical application in treating these disorders.

The NIDDK is also pleased to be establishing the congressionally-mandated George O'Brien Kidney and Urologic Research Centers. These multi-disciplinary centers promise to accelerate advances in research on the prevention and treatment of kidney and urinary tract disorders, particularly on the critical problems of end-stage renal disease and prostatic enlargement.

In a major achievement in kidney and blood research, NIDDK researchers have cloned the gene for erythropoietin, a hormone that stimulates the production of red blood cells. The miracle of recombinant DNA technology has provided for its commercial production, and it has corrected the anemia of ESRD. This improved rehabilitation of patients on chronic dialysis is one of the most significant advances in clinical nephrology and hematology in recent years.

The accomplishments I have presented were made possible because of a strong commitment to a comprehensive research effort, which requires talented investigators whose skills are honed through research training and research career awards. We also recognize the many important contributions made by research centers and our intramural program.

Mr. Chairman, the FY 1988 budget request for this Institute is $475,891,000. In addition, the Administration proposes a policy of appropriating the total NIH allowance for research project grant commitments at the time that they are incurred. The FY 1988 request includes an additional $327,084,000 for these future year commitments. I will be pleased to answer any questions you might have.

Statement of Dr. T. Franklin Williams

The common problems facing the growing numbers of old and very old persons in our society, as well as the nature of the aging process itself, continue to present challenges for research supported by the National Institute on Aging (NIA).

Among the many disorders associated with growing older, Alzheimer disease is one of the most devastating and feared. At the NIH, Alzheimer disease presents a unique challenge to scientists who are trying to find out what causes the disease, how it progresses, and how we can treat, cure, and some day prevent it.

This year the NIA learned that its ten Alzheimer Disease Research Centers (ADRC) can provide a rapid and efficient tool for the testing of promising new drugs. A recent positive report in the New England Journal of Medicine on the usefulness of THA, tetrahydroaminoacridine, has prompted the NIA, the Alzheimer's Disease and Related Disorders Association, and the Alzheimer centers to initiate clinical trials of this drug. The availability of these centers has considerably reduced the time required to organize a clinical trial.

One of the major issues that still challenges scientists is the diagnosis of Alzheimer disease. Several recent and very significant findings may soon lead to a chemical diagnostic test. Scientists have found an abnormal protein in the brains of Alzheimer patients and particularly in those parts of the brain that are most severely affected by the disease. Using a monoclonal antibody, Alz-50, investigators have found abundant amounts of a protein in the brains of Alzheimer patients. This protein is called A-68 and has been found throughout the diseased nerve cells, most of it concentrated in the degenerating nerve cell endings which form the characteristic neuritic plaques of Alzheimer disease. This abnormal protein has also been identified in the cerebrospinal fluid of a small number of Alzheimer victims, but not in non-affected persons. If this work is corroborated by others, this technique may become a valuable diagnostic tool.

Another area has captured the excitement of the scientific community and may be a framework on which to build a theory about the delicate balance of calcium concentrations within the Alzheimer brain. The primary role of calcium within nerve cells is to transmit information and keep the cell alive and the brain functioning. In several independent studies, grantees have noted disruptions in calcium balance in Alzheimer disease and, to a much lesser extent, in normal aging. Most recently, scientists have speculated that excess calcium in nerve cells may be the key to the entire range of changes that scientists see in the Alzheimer brain.

In research on the mechanisms of Alzheimer disease one thing has been clearly established—nerve cells die, particularly in that part of the

brain that commits information to memory. Several years ago, grantees demonstrated that a nerve cell whose connections to other nerve cells were severed by a sudden injury or accident could "resprout" new nerve fibers so that the brain's circuitry was not disturbed. Surprisingly, new research has shown that this is also true in Alzheimer disease. In Alzheimer patients, surviving brain cells make a futile attempt to hold off the ravages of cell death, ultimately to no avail. However, investigators are hopeful that it may someday be possible to harness the brain's natural, albeit limited, ability to repair itself which may lead to strategies to treat Alzheimer disease.

To answer questions about the number of people suffering from this disease, the number of new cases we can expect each year, and risk factors that contribute to its development, the Congress directed the Institute to fund an Alzheimer Disease Patient Registry. The Institute has awarded funds to six institutions for this purpose. Just as the NIA's Alzheimer centers are attempting to coordinate research on the disease, grantees involved in this Registry will work together to form a single national resource for various data on the disease. They will work with the ADRCs and with other Federally funded grantees to gather information on such things as screening techniques, the accuracy of current diagnoses, risk factors, early markers of the disease, and genetics, in an effort to establish a national registry of patients and to give us a research base to answer questions related to health care policy.

Hip fractures result in pain and suffering to the individual, hospitalization, and a long period of recovery. Also, they often mean a change in lifestyle and loss of independence, and for many persons they lead to institutionalization. In the U.S., costs for medical care of hip fractures are roughly $2 billion each year.

While the relationship between osteoporosis and hip fractures has been the focus of many studies over the past several years, the NIA is now broadening its view of the causes of hip fractures to include studies of gait disorders and of falls. One study of risk factors for falls evaluated residents of intermediate care facilities. Balance and gait disorders, poor back flexibility, decreased leg strength, and poor distance vision were assessed in relation to the occurrence of falls. The results showed that as the number of risk factors for falling rose, so did the number of falling incidents. No one with three or fewer disabilities fell more than once during the study, whereas every person with seven or more did. This study indicates that tests of balance and gait, combined with data routinely gathered during medical exams, can be used to identify potential fallers.

The NIA, the National Institute of Arthritis and Musculoskeletal and Skin Diseases, and the National Institute of Diabetes and Digestive and Kidney Diseases are continuing to collaborate on research conferences on osteoporosis and osteoarthritis and are jointly funding research in these fields.

We are making progress in understanding the science of aging and are now ready to use new techniques to probe genetic changes and to distinguish aging processes from disease. We know that young cells are able to divide and reproduce themselves up to some theoretical limit, while aging cells are no longer capable of continued replications. If we knew how young and old cells differ, we might be able to understand why cells lose the ability to replicate with age. To study this phenomenon,

scientists have asked whether aging cells contain proteins not found in young cells. By using monoclonal antibodies investigators have identified a protein found in large amounts in non-growing and aging cells, but essentially absent from young, growing cells. The investigators named this protein "statin," proposing that it could be causally related to the inability of old cells to continue growth. This and other work will be useful in understanding the internal controls on growth and reproduction of individual cells.

In a related study, investigators have shown that when genetic material, known as messenger RNA (mRNA), from aging cells in culture is inserted into the nuclei of young cells, the mRNA slows their further replication. Attempts are being made to identify the gene(s) responsible for expression of this "aging" factor.

The nutritional needs of older people are still largely unknown, despite the growing awareness of the importance of nutrition to good health and disease prevention. Research is confirming that there can be no single set of guidelines for all older people, and that recommended dietary allowances based on age alone may be misleading. For example, a study of older men who took zinc supplements found that their response to tetanus vaccines was improved, reflecting an improved immune response. On the other hand, an Institute grantee has shown that zinc supplementation in older men appears to block the beneficial effects of exercise on HDL-cholesterol, the so-called good cholesterol. Such results underscore the need to study the full range of health effects of nutrients in older persons. The NIA has now introduced a special emphasis research career award to promote research in the area of nutrition and aging.

Contrary to many common myths, aging does not mean a universal and inevitable decline in all physiological functions. Rather, as the NIA's Baltimore Longitudinal Study of Aging (BLSA) is showing, aging is a highly individual experience. Although studies that compare subjects of different ages document a significant decline in many biological functions with age, individual differences are enormous. For some measures, 80-year-old persons perform as well as the average 50-year-old.

BLSA investigators performed kidney function tests over a number of years in 254 normal BLSA male volunteers ranging in age from the 20s to the 80s. Rather than a single pattern, the men showed considerable differences in the course of kidney function over time. One-third had no decline in renal function with age, several displayed a significant improvement, and others showed variable degrees of decline. These marked individual variations demonstrate the pitfalls inherent in making judgments about individuals from average changes in a population. Recognizing this great diversity may aid in devising interventions that will help improve performance by older individuals.

Improving the oral health of older people is the focus of a collaborative project between the NIA, the National Institute of Dental Research and the Veterans Administration. A research agenda has identified critical areas such as the relationships between oral health and nutritional status and chronic pain in older persons.

Far from the basic laboratory milieu, scientists are discovering that by shaping the individual s environment—his or her work, community, health care setting—older people can exercise greater control over their

lives. One possible intervention is based on the finding that some older people are less able than younger people to detect many common odors. In particular, one of our grantees has recently shown that a declining sense of smell impairs the ability to detect ethyl mercaptan, the warning agent commonly added to propane. Propane gas leaks cause hundreds of explosions each year, resulting in injuries and fatalities. Possible solutions include changing the types of warning gases or using visual or auditory detection signals.

Many people believe that age per se is responsible for hearing losses, reduced comprehension, and decline in memory. The fact that some older people experience a diminished ability to communicate with others leads many to attribute this problem entirely to hearing loss or mental confusion. New evidence suggests yet another explanation. When speech is not clear—when it is too rapid, garbled, or nonsensical, for example—older people often have difficulty in processing and understanding the spoken word. When there is a clear and orderly speech pattern, many older people can comprehend the spoken word about as well as younger ones.

At NIA's Gerontology Research Center in Baltimore scientists have developed behavioral training methods for treating urinary incontinence and have demonstrated its success in up to 80 percent of women with this problem living at home. The success of the study has generated a great demand from the outside community, including a collaboration with French scientists, for training in these techniques. The Baltimore research team, with support from the Health Care Financing Administration, has extended its outpatient studies to nursing home patients. Returning nursing home patients to some level of continence can potentially reduce their level of dependence and improve their sense of personal control as well as considerably reduce the costs of care for persons with this problem—a cost that is estimated to be at least $1.5 billion for patients in nursing homes.

The increases in numbers of old and very old persons is a world-wide phenomenon. By 2025, 18 or more nations will have a million or more octogenarians, and the U.S. will rank third on the list with an estimated 14.3 million.

To learn more about the universal characteristics of this age group, the NIA has contracted with the Center for International Research at the U.S. Bureau of the Census to produce an International Data Base on Aging based on social, demographic, and economic data supplied by the World Health Organization, the National Population Census in each of 31 countries, and the Luxembourg Income Study.

Last year the NIA was directed to pursue cross-national studies on topics such as Alzheimer disease, cancer, heart disease, and osteoporosis. Early findings show that there might be significant cross-national differences in the prevalences of these chronic conditions, as well as in the functional capacity of older persons. Negotiations are under way with U.S. and foreign scientists for the development of research protocols in eight countries. NIA and the Agency for International Development are working together, as directed by Congress, to extend the investment in international research.

Older members of minority groups in the U.S. tend to have a

disproportionate number of diseases and disabilities. At a conference in 1986 the Institute took steps to involve leaders in the minority health community in research on specific problems of older minority populations.

The Omnibus Health Bill, signed into law last year, has directed the NIA to establish a national resource for advice to Alzheimer families. In FY 87, the NIA will establish a National Alzheimer Education Program, which will expand our already active information program on Alzheimer disease and give priority to educational materials aimed at families, practitioners, health care providers, and allied health professionals.

Also as directed in this bill, our newly created Office of Alzheimer Disease Research will submit a research plan on the epidemiology and identification of risk factors for Alzheimer disease and related dementias, and for the development and evaluation of reliable diagnostic and assessment procedures.

Since its inception, one of the Institute's highest priorities has been to remedy the drastic lack of trained professional and allied health workers serving the elderly population. In response to the 1984 Congressionally mandated plan to improve and expand training in geriatrics and gerontology, we have implemented several new approaches to training and career development: the Geriatric Leadership Academic Award; the Complementary Training Award for Research on Aging; the Co-Funded Institutional National Research Service Award; the NIH Intramural Research Training Award Program; the Collaborative Academic Geriatric Training Program with Johns Hopkins; and the Summer Institute in Geriatrics for Medical Students and Postdoctoral fellows. In response to directives contained in this year's Omnibus Health Bill, the Institute plans to make awards to distinguished senior researchers and their promising junior associates who are making significant contributions to biomedical research related to Alzheimer disease and related dementias.

Mr. Chairman, the 1988 budget request for this Institute is $237,925,000. In addition, the Administration also proposes a policy of appropriating the total NIH allowance for research project grant commitments at the time that they are incurred. This approach to grant funding would inform the research community of the total funds available for continuation costs. In accordance with this proposal, the FY 1988 request includes $81,751,000 for future year commitments associated with competing project grants awarded in FY 1988. I will be pleased to answer any questions you might have.

Statement of Dr. Craig K. Wallace

The Fogarty International Center (FIC) is unique among the National Institutes of Health (NIH) components with its mandate to both promote and support international collaboration in biomedical research. Such international activities contribute to improvements in the health of the American people by advancing knowledge of disease and disease processes worldwide. I would like to give you a brief overview of the ways in which the Center functions as a keystone for international activities of the NIH and to review highlights of recent accomplishments deriving from international collaboration for which we at the FIC are responsible.

The FIC is known worldwide for its International Research

Fellowship Program which provides opportunities for foreign scientists in the early stages of their careers to conduct collaborative research in U.S. laboratories. Since the inception of this program in 1958, we have supported scientists from 51 countries. Currently 54 nations participate in the program and have arrangements with us to nominate scientists. During 1986, scientists from 35 countries received awards and are presently conducting research with U.S. scientists in 22 states.

Recent collaborative research between foreign and senior U.S. scientists supported under this program has resulted in information having immediate applicability. For example:

- An International Research Fellow from Israel, working with scientists from the Albert Einstein College of Medicine, demonstrated that glucocorticoids enhance hepatitis B virus gene expression. Recent clinical evidence suggests that the treatment of hepatitis B virus carriers with glucocorticoids has had adverse effects. This collaborative study will help us understand why glucocorticoids cause such effects.

- Using computer modeling, an International Research Fellow from Sweden, working with scientists from the University of Georgia, has developed two potential dopamine agonists. These compounds, when synthesized, should be useful in the management of various neurological disorders ranging from Parkinson's disease to schizophrenia.

The Senior International Fellowship Program enables U.S. scientists to conduct research abroad. Among important scientific activities supported recently was a Senior International Fellow working in Sweden who determined how excessive doses of aspirin cause hearing loss.

Typically, collaborative research projects, begun with funding from our fellowship programs, continue after the conclusion of the specific award, often for the remainder of the scientists' professional careers. We have documented that as a result of this particular program, the teaching and research activities of U.S. institutions have been strengthened by the establishment of new research centers and departments, the addition of research programs, and the introduction of new research techniques. The individual research and professional careers of the U.S. scientists involved have also been enhanced.

The FIC is responding to the current worldwide health crisis of acquired immune deficiency syndrome (AIDS). Although many institutions in the United States and abroad are conducting research on AIDS, we recognize a need to strengthen collaborative ties between U.S. and foreign institutions with active AIDS research programs. We are, therefore, initiating an INSTITUTIONAL AWARD to U.S. institutions that have interdisciplinary strengths in AIDS research. The award will support a principal investigator at the U.S. institution, and provide up to 60 months of fellowship activity. The fellowship will be available to U.S. or foreign scientists at all levels of their professional career, and range from 3 to 24 months. Two awards will be granted in FY 1988.

The FIC's Scholars-in-Residence Program continues to support world renowned biomedical researchers who come to the NIH to collaborate on projects in the forefront of science. An example of the research conducted recently was that by a Scholar from Israel. He examined the regulation of bone mineralization in the elderly in relation to hormones and nutrition. Loss of bone minerals with aging, as in osteoporosis, is a major health problem universally, particularly in China, East Asia and in certain populations of European descent.

An Australian Scholar has examined the cause of non-A, non-B hepatitis by organizing a multi-laboratory comparison of specimens from the Soviet Union, Burma, India, the United States and Australia. Another scientist, from the California Institute of Technology, will study the interactions of biologically active molecules. Other Scholars will study the mechanisms by which viruses and other disease-causing organisms penetrate living cells and disrupt the internal machinery thus causing diseases such as AIDS, cancer, and hepatitis.

Through interaction with NIH intramural scientists, the Scholars broaden the interests of individual scientists, bring fresh points of view to their laboratories, and promote dialogue between groups at the NIH working in different disciplines. They exert a catalytic effect on the host laboratories and stimulate new approaches to old problems.

The FIC's Advanced Studies Program addresses emerging international health issues and has the potential to influence the development of biomedical science resources internationally. For example, the FIC is the lead for the Public Health Service (PHS) in organizing the "Third International Conference on AIDS." A total registration of some four thousand persons is expected for the June 1987 meeting. Other current activities of the FIC's Advanced Studies Program involves studies of the potential for the control or eradication of (1) selected infectious diseases such as hepatitis, measles, rabies, and yaws, and (2) selected chronic diseases such as liver cancer and lung cancer. The proceedings of FIC's International Symposium on Poliomyelitis Control was recently cited by a Nobel laureate as the best compilation on the subject.

As indicated initially, the FIC plays a unique role at the NIH as coordinator of international activities. We manage over 57 bilateral agreements involving 32 countries and are in a key position to be immediately responsive to Administration initiatives in international science and technology. Last year, I reported to you that the FIC expected to play an integral role in the technical management of a major new program with India, the Vaccine Action Program (VAP), which was announced by President Reagan and Prime Minister Gandhi. The program focuses on diseases that can be prevented through immunization programs. It includes a complete range of activities, from basic research and development of new vaccines to strengthening of quality control and vaccine manufacturing capability in the Indian private sector. I am pleased to report that the Memorandum of Understanding is scheduled to be signed by Secretary Bowen on his forthcoming visit to India. The joint U.S.-India working group is expected to meet in May of this year to consolidate work already under way.

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At the November 1985 Reagan-Gorbachev summit meeting, it was agreed to expand U.S.-Soviet cooperation in medicine, particularly in cancer research. The FIC was pleased to organize the visit of the Director of the NIH to the Soviet Union this past fall and to participate in discussions on potential new areas of collaboration with the Soviet Union. As a result of these discussions, the NIH expects to expand cooperation in such fields as cancer, cardiovascular diseases and arthritis.

As a designated WHO Collaborating Center, the FIC has initiated an eight-country cooperative project with WHO and PAHO on "The Role of International Collaboration in Strengthening Health Research Capabilities in the Region of the Americas." The participants, primarily heads of national research councils in Central and South America, are conducting studies in their respective countries on how national policy, institutional initiatives, and the activities of individual scientists contribute to international collaboration in the health sciences. Based on study findings, recommendations will be made on how research programs at institutions in the United States and elsewhere in the Region of the Americas can be strengthened through expanded collaboration.

The FIC has also pursued other activities that foster U.S. science participation in Latin America. For example, we have been asked by the White House Office of Science and Technology Policy to identify possible areas of biomedical research that may be of mutual benefit to the United States and Brazil. The FIC also coordinates NIH participation in biomedical research with Mexico under the U.S.-Mexico Mixed Commission on Science and Technology. In FY 1986 the FIC facilitated collaboration on problems of low birth weight infants in U.S. and Mexican populations and on the role of human lactation and nutrition in infant health.

These are but a few examples of the ways in which the FIC plays a significant coordinating role at the NIH. Because of these functions, the NIH is able to respond more immediately and effectively to international scientific initiatives.

The FIC continues to serve as the administrative conduit for U.S. Government core support of the Gorgas Memorial Institute of Tropical and Preventive Medicine, Inc., in Washington, D.C., and the Gorgas Memorial Laboratory in Panama. In consonance with Congressional intent, as expressed in House Report No. 95-240, 95th Congress, the FIC is not, however, involved in the management of the scientific programs or operations of the Institute and Laboratory.

The total appropriation requested for FY 1988 is $11,566,000, of which $1,934,000 is for core support of the Gorgas Memorial Instiute and Laboratory. I will be pleased to answer any questions.

CANCER CELL RESEARCH

Dr. DEVITA. Fifteen years ago, the National Cancer Act was passed and had as its main purpose strong support for basic research for cancer. One of the major results of the support for that research is that we now know what the cancer cell is really trying to do.

As a result of the major support of molecular biology, we have learned that the cancer cell is really trying to recapitulate embryonic development. That is, it is going through the steps normally required after fertilization of the egg: growth, migration of cells, formation of organs.

The cancer cell has captured the programs that control these processes at the molecular level and it is, in a sense trying to form another human being or a particular organ. It fails, but it retains the capacity to kill the patient because it is able to grow and metastasize.

I tell you this because I think that the most practical information that we have learned is that all of these steps are under genetic control. In most cases, the genes for these products have been isolated, and in many cases the products that these genes make have been purified and are available.

In light of your comments this morning, Mr. Chairman, many of the products have been patented by American companies and are being produced in clinical trials supported by the Cancer Institute. They are being supplied to researchers free of charge by the companies, most of them really in the United States, so that we are, in fact, able to get these things out to clinical trials.

Senator CHILES. I am glad to hear that.

Dr. DEVITA. The good news about this is that, given the current level of our technology, anything that is under genetic control is susceptible to ultimate control. We are quite optimistic about understanding the switches that control these genes in a way that will allow us to more effectively prevent and treat cancer.

One final point I would make in summary here is that the Cancer Institute, as a result of the Cancer Act, was mandated to build a network to allow effective translation of basic research findings out into the clinics and the practice of medicine, and we have been spending a good deal of time building that network.

That network is up and functional and is able to translate the technology at whatever level it develops, and I can describe it to you in some detail during the question and answer session. However, it has supported many clinical trials.

Some of them this year have turned positive in some very common tumors, tumors that are common in the elderly like colon cancer. For the first time, we are having good positive results with what we call adjuvant therapy, the use of drugs or biologics with surgery, in colon cancer which is the second most common cancer in the country.

Mr. Chairman, the budget for the Cancer Institute this year is $1,811,117,000, which includes $1,366,000,000 of obligational authority for funds which is the $64 million of extended availability for 1987, and

$508 million of advanced appropriations for the funding of grants that were competing in 1988.

That concludes my summary statement, Mr. Chairman. I would be happy to answer questions.

Senator CHILES. All right, sir.

Dr. Fauci of the National Institute of Allergy and Infectious Diseases.

NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASES

Dr. FAUCI. I would like to take the 2 minutes or so that I have to outline briefly for you the mission and underlying goal of the National Institute of Allergy and Infectious Diseases.

It would be simplest to think of the underlying goal as the study of the function of the immune system. The immune system, simply speaking, is the defense department of the body. It protects the body against both outside and inside invaders, be they microbes, foreign antigens, or even cancer transformed cells.

When the system functions normally, it protects us against these micro-organisms. Because of these invaders we have studied the pathogenic mechanisms of these microbes, be they bacteria, viruses or other microbial organisms. In addition, we have studied and put a major effort into the development of antimicrobials such as antibiotics and antiviral agents.

When the immune system needs to be boosted to get extra help to protect the body, therein we have vaccine development, another major effort of the Institute. If the immune system functions normally but we want to suppress it such as, for example, in organ transplantation rejection prophylaxis, we can manipulate the immune system to bring about that suppression.

If the immune system functions too much, then you have the diseases such as asthma, allergy, hypersensitivity diseases, and autoimmune diseases. In these cases, we also develop procedures to suppress it. Finally if the immune system functions too little, we have immunodeficiency diseases that may be either acquired or congenital.

Our interest in the former, acquired immunodeficiencies, has led this Institute to take a major interest and role in the studies of the acquired immunodeficiency syndrome. As you yourself mentioned, about 59 or 60 percent of the NIH AIDS funding is in our Institute. Looking at it from the other side, about 30 percent of our total appropriation for NIAID is, in fact, in AIDS research.

We have discussed AIDS a little bit this morning. Hopefully, we will have an opportunity to discuss a little more in the question period. We can say that this disease is really the prototype of the type of disease that this Institute should be studying because it is an infectious disease of the immune system. AIDS is caused by a virus which has the diabolical property of being able to attack the very defense mechanisms which were established to protect the body against these invaders.

Senator CHILES. You are saying, if we could find a defense for AIDS we would not be dealing just with that malady as such; it would be leading us to being able to attack many other infectious diseases?

Dr. FAUCI. That is quite true, and that, in fact, exemplifies and underscores the spinoffs of the research that led us to be able to attack AIDS. Similarly, what we are doing on AIDS will allow us to further attack other diseases in the future.

This concludes my remarks, Mr. Chairman. I will be happy to answer any questions.

Senator CHILES. Dr. Löe with the Institute of Dental Research.

NATIONAL INSTITUTE OF DENTAL RESEARCH

Dr. LÖE. It is a great pleasure for me to be able to report to you today that the dental health of the American people is getting better all the time. Last year we completed oral examinations of 21,000 adults who were seen at work sites and senior citizen centers throughout the Nation.

These data, combined with the data from a survey of American school children we conducted 7 years ago, give us good and reliable information on the oral health of approximately 150 million Americans between 5 and 80 plus years old. The adult survey showed that only 4 percent of working adults were missing all of their teeth, which is a significant drop compared to a 1974 survey.

When one translates that drop into savings in the cost of dentures, for instance, we calculate that for the period from 1974 to 1981 alone, Americans saved close to $5½ billion.

Now, from the children's survey we know that over one-third of school children growing up in the United States today have never had a cavity and never had a filling in their mouths. For the remaining children, the rate of tooth decay has been cut in half.

That, too, adds up to enormous savings. We estimate that the annual savings in the Nation's dental bill is approximately $2 billion per year.

REASONS FOR CARIES REDUCTION IN CHILDREN

Senator CHILES. What do you attribute that tremendous decrease in cavities in children to?

Dr. LÖE. I think there are several reasons but one of the most important is the adoption of community water fluoridation and other fluoride programs. Life styles also have been changing, with better oral hygiene and more frequent dental checkups. People are more interested in maintaining and retaining their teeth.

WATER FLUORIDATION

Senator CHILES. Fluoridation of the water, that was a Communist plot, was it not?

Dr. LÖE. So some people have said, but——

Senator CHILES. That was when I was in the State legislature a few years ago.

ADULT SURVEY FINDINGS

Dr. LÖE. Forty years of fluoridation have had a tremendous impact on the dental health of both the young, and, as we now are seeing, on the mature adult. I will be reporting on the findings from our adult study in Chicago tomorrow, at a session that is jointly sponsored by the American Dental Association and the American Association for Dental Research.

In summary, the results are reassuring. Not only have we virtually eliminated toothlessness in the middle years, but one-half of the population below 65 years of age has lost, at most, one tooth.

In contrast, we found that 42 percent of Americans 65 years and older were toothless. This is, of course, a significant number. Employed adults and older Americans also continue to suffer from decay on the crowns of teeth. However, decay affecting the roots of teeth was three times more common among older age groups than the working Americans. Most adults also show signs of periodontal disease with an increase in the prevalence and a worsening of symptoms with age.

In summary, Mr. Chairman, I think the message is clear. In our lifetime we have seen an enormous improvement in the dental health of children. Now we are beginning to see improvements carrying over to the middle years. But we still face serious oral health problems among mature adults, and especially among our older citizens. That would be a fair summary of my statement within the 2 minutes.

Senator CHILES. Dr. Lenfant of the National Heart, Lung, and Blood Institute.

NATIONAL HEART, LUNG, AND BLOOD INSTITUTE

Dr. LENFANT. Thank you, Mr. Chairman.

Mr. Chairman, I would like to spend a couple of minutes telling you about our Institute and its mandate. Our Institute is responsible for diagnosis, and cure of the diseases of the heart, the lungs, and the blood. Altogether these diseases account for more than one-half of the deaths that we see in this country each year. Last year 51.6 percent of the deaths were due to all of these diseases.

The good news is that during the last 20, 25 years we have witnessed considerable progress which has been manifested by a decline in death rates, particularly from cardiovascular diseases. All cardiovascular diseases have declined by about 23 percent during the last 10 years only. Stroke, which results from hypertension in most cases, has declined much more.

We believe that these significant results are coming from our major investment in basic and clinical research. In fact, my written statement describes a number of examples and achievements from the last year which we believe have had major health benefits and have the potential to reduce the health care costs from heart, lung, and blood diseases.

However, at the same time we are actively pursuing basic research activities. I should underscore that almost every day we see dividends

from this basic research, dividends which in turn contribute to clinical research programs.

These conclude the remarks that I wanted to make to introduce our Institute, Mr. Chairman, and I will be pleased to answer any questions.

Senator CHILES. Thank you, sir.

Dr. Gorden with the National Institute of Diabetes, Digestive, and Kidney Disease.

NATIONAL INSTITUTE OF DIABETES AND DIGESTIVE, AND KIDNEY DISEASES

SUMMARY STATEMENT

Dr. GORDEN. Thank you, Mr. Chairman.

Our Institute addresses a number of different problems including diabetes, digestive, nutritional diseases, kidney, urologic, and blood diseases. These include a number of genetic and orphan diseases.

These groups of diseases are basically supported by scientific investigations into genetics and the mechanisms by which cells communicate with each other. They include a large number of studies on very basic mechanisms.

In insulin-dependent diabetes we focus our attention on those trigger mechanisms that kill the insulin producing cells. We also emphasize the study of the major risk factor of noninsulin-dependent diabetes, which is obesity.

We focused on a major clinical trial in an attempt to interdict the major vascular, eye and kidney complications of diabetes and we plan a major initiative into the really huge problem of kidney disease in diabetes mellitus.

Our endocrine program has supported a number of studies related to growth factors which interrelate with a number of other diseases that you have heard about today. Our investigators in the last year have narrowed the search for the cystic fibrosis gene down to less than one-quarter of 1 percent of the human gene, and we have also made major progress in the treatment of severe disabling disorders such as kidney stones and gallstones.

Very recently, in a major triumph of biotechnology, we have introduced a new medicine for the treatment of the anemia of end-stage renal disease, really a major triumph for those individuals who are on dialysis.

That concludes my remarks. I will be happy to answer any questions you may have, sir.

Senator CHILES. Thank you very much, sir.

Dr. Williams of the National Institute on Aging.

NATIONAL INSTITUTE ON AGING

Dr. WILLIAMS. Thank you, Mr. Chairman, and Senators Weicker and Hatfield.

I would like to start by stating that I fully agree with your opening comments that the major problems facing older people are really not so

much aging as the diseases that these people are afflicted with. Certainly, one of the diseases of great concern is that of Alzheimer disease.

Fortunately, we can report, almost weekly, exciting advances in this area in research carried out by the 10 congressionally directed Alzheimer disease research centers, as well as other activities within our own Institute and in other institutes.

Even since I prepared my written testimony, we have had announcements of scientific breakthroughs in Alzheimer disease research. For example, the area of chromosome-21 in which the familial form of Alzheimer disease is inherited has been identified. Simultaneously identified in that very same area, although it may not be the same gene, has been the identification of the gene area that controls the amyloid deposits that appear in the brain lesions of Alzheimer disease victims. It is also noteworthy that that same chromosome, No. 21, is the site of Down's syndrome. Victims of Down's syndrome also have changes in the middle years similar to those of Alzheimer patients, in their brains. So, it is clear we are coming in on a major component of the genetic role in Alzheimer disease. This is not the only cause of the disease, but it certainly is a big step toward understanding it.

There are other advances in Alzheimer disease of almost equal importance. One is in the area of diagnosis. One of the proteins that has been identified in the brain lesions, namely the so-called A–68 protein, has also been identified in the spinal fluid of a series of victims of Alzheimer disease and not in normal spinal fluid. If this finding holds up we may have a reliable diagnostic test that can be applied in life to be more certain about this diagnosis.

Finally, just a few months ago, came the report of some very promising results with a new compound, tetrahydroaminoacridine, or THA, in a small group of Alzheimer victims. This has led us to put into motion plans for a quick but carefully planned clinical trial of this compound for efficacy, safety, and duration of action. We will do this through our 10 centers, as well as other sites, and will be working with both the Alzheimer's Disease and Related Disorders Association and the Food and Drug Administration.

We expect to be able to start this clinical trial within another 2 or 3 months and would expect to have answers within 2 years. We have had good cooperation with the Food and Drug Administration in moving quickly on this effort.

There are a number of other obvious priorities in our Institute, but I will look forward to commenting on them later.

Senator CHILES. Senator Hatfield is going to have to leave, and he would like to ask a question to you, Dr. Williams.

THA CLINICAL TRIAL

Senator HATFIELD. I appreciate that.

Dr. Williams, you mention this THA experience in New England, or at least reported in the New England journal, and you indicate that the 10 Alzheimer's centers now could replicate perhaps a beginning of this testing.

My question to you, do you have the resources to do that, and if not, are you redeploying the existing resources? How are you going to meet that resource requirement?

Dr. WILLIAMS. We will redeploy necessary resources to carry out this clinical trial.

Senator HATFIELD. I would like to suggest, Mr. Chairman, this may be one of those instances where with the general supplemental coming down the track, rather than to redistribute already the rather limited resources, we ought to add to those resources in order to meet this very exciting possible breakthrough on this testing.

I need not repeat the familiar—but we know that $34 billion are being expended this year on one of the most deadly and terrible diseases of all, Alzheimer disease.

Senator CHILES. What kind of dollars are you talking about?

Dr. WILLIAMS. We are talking about a total of about $2 million over 2 years to carry out this test, with careful planning, for the right size sample.

Senator HATFIELD. I just want to raise that, Mr. Chairman, as a possibility that we might consider on the general supplemental, because it seems to me the sooner we can launch this program that you outlined the better. It's very cost effective. Two million dollars is a very small amount to ask for that.

Senator CHILES. That is a very good point.

Senator HATFIELD. I will talk to you some time later on, perhaps submit for the record. We have reached a point where we should expand a number of those centers out across the country.

Senator CHILES. Dr. Wallace.

JOHN E. FOGERTY INTERNATIONAL CENTER FOR ADVANCED STUDY IN THE HEALTH SCIENCES

Dr. WALLACE. Fully recognizing that the basic focus of the National Institutes of Health is domestic research, we at the Fogarty International Center have a very specific mandate to promote and support international activities relating not only to the health of the American people but to worldwide health problems as well. It is a mandate that we embrace with enthusiasm.

The National Institutes of Health, in advancing the medical sciences and meeting the challenge of improving the health of the American people, made a very wise choice in supporting excellence abroad through a long-maintained, modest international investment, some 1 to 2 percent of its annual budget.

During fiscal year 1986 the NIH international effort amounted to approximately $70 million; $32 million for foreign research grants and contracts, $27 million to support foreign scientists in the United States, and $1.9 million for U.S. fellows and trainees overseas.

Our programs support many of the world's best international bioscientists and researchers in about 60 countries. Other benefits beside the direct advancement of biomedical science are derived from our pro-

grams; certainly not the least is their contribution to general goodwill for the United States.

We at the Fogarty International Center have three international foci: the individual, the disease, and the geography. The Fogarty International Center assures that international opportunities are not overlooked and that international expertise is part of the NIH equation.

I would point out that one of this year's Nobel laureates, Dr. Rita Levy-Montalcini, was a Fogarty scholar-in-residence. We have recently documented that United States-foreign scientist linkages established early in scientists' careers often lead to a lifelong productive collaboration which would be impossible to engender in later years. There are undoubted advantages in addressing a specific disease problem of worldwide health concern. This committee has discussed AIDS. We at the Fogarty International Center are using our expertise to coordinate the Third International AIDS Conference here in Washington during June. We also have initiated a Special International Fellowship Program in AIDS in which U.S. institutions can have immediate flexibility in selecting fellows to participate in international scientific exchanges of scholars for AIDS research.

Regarding geographic foci, the Fogarty International Center has been able to play an integral part in identifying global concerns in neglected geographic regions and to foster attention to these programs. For example, in India the Vaccine Action Program will focus on diseases that can be prevented through immunization programs and includes a complete range of activities from basic research and development of new vaccines, to strengthening quality control and vaccine manufacturing capability in the Indian private sector. Through our efforts, I am pleased that the Secretary of Health and Human Services is scheduled to sign the memorandum of understanding during his visit to India later this year.

I believe it is very important to maintain this modest investment in international activities. By curtailing any aspect the United States might save a few million dollars, but the costs would be tremendous with regard to international medical progress and in terms of goodwill abroad.

The Fogarty International Center's appropriation request for fiscal year 1988 is $11,566,000, of which $1,934,000 is for the support of the Gorgas Memorial Institute and Laboratory.

Thank you, Mr. Chairman.

Senator CHILES. Thank you, sir.

LUNG CANCER

Senator CHILES. Dr. DeVita, in Florida lung cancer accounts for some 20 percent of all cancer deaths each year, and cigarette smoking is responsible for 85 percent of the lung cancer in men and 75 percent in women, overall about an 83-percent rate.

There has been a great deal of attention given recently to the hazards of cigarette smoking in nonsmokers. To control smoking in public

places, in 1985 Florida passed a Clean Indoor Act which limits smoking in all State and local government buildings, hospitals, educational facilities, theaters, grocery stores, and places of employment.

In your general statement you identify certain compounds found in cigarette smoke as tumor promoters, do not cause cancer directly but facilitate the cancer process. Could you explain to me in a little more detail how cancer initiators and promoters interact to develop a cancer.

In the case of cigarette smoke as a promoter, would the nonsmoker have to first be exposed to an initiator such as radiation to be at risk, or in your opinion does exposure to the cigarette smoke alone present some kind of a substantial risk?

Dr. DEVITA. Mr. Chairman, cancer is generally thought to occur in two stages. The first you mentioned, initiation. The second is promotion.

Initiators are sometimes powerful enough to cause cancer all by themselves. Promoters are not. And some chemicals have both properties. In cigarettes there are about 1,000 different chemicals that are mixtures of initiators and promoters.

We think that the promoters are important in cigarette smoking because if you are irreversibly initiated to have cancer, when you stop the exposure to whatever it is that caused the initiation, you still get cancer. However, within 10 years after stopping smoking, the incidence and mortality from a lot of cancers associated with cigarette smoke is down to normal. For lung cancer it takes 15 years, but it also drops to normal.

So, we think the most important factor of the chemicals is their promotion side, although initiators are in cigarette smoke as well. The fact that promoters are playing such an important role is good news because stopping them reduces cancer risk.

Now, the people who are exposed to sidestream smoke from others who are smoking get exposure to very, very toxic chemicals. In fact, the sidestream smoke has more toxic material in it than the smoke that is actually inhaled by the smoker. The smoke from the burning end of the cigarette is much hotter so that although the quantity is small the toxicity of the smoke is greater. People exposed to sidestream smoke are getting exposed to both initiators and promoters and they have the same reduction of risk in terms of cessation of smoking.

If they stop their exposure to sidestream smoking, you can expect that their relative risks of getting lung cancer will come down. So, promoters are in there and they are important because if you pull promoters away you can stop cancer.

GOALS FOR THE YEAR 2000

Senator CHILES. Last year the National Cancer Institute issued a plan that could reduce the annual cancer death rate by as much as 50 percent by the year 2000. Now, that plan recommended diet changes, massive reductions in smoking, increased medical screening, and nationwide application of the state-of-the-art methods of treatment.

What efforts are underway at NIH to help implement that plan, and what kind of results, if anything, have we seen?

Dr. DEVITA. They are goals, not estimates. We like to emphasize that point because estimates are what happen if you sit back and watch something and goals are something that requires action.

One-half of the mortality reduction would be due to prevention. You have mentioned the major one, that is smoking prevention. I personally think we are ahead of schedule on the smoking prevention. The act you have mentioned in the State of Florida, the recent activity in Beverly Hills, CA, and in Cambridge, MA, are all signs that the public mood is to reduce exposure to smoke.

We need to reduce smoking by about 50 percent of what it was in 1980 and make some dietary changes to achieve the prevention goals. The other one-half are treatment.

What we have done at the Cancer Institute is to make attempts to double the number of patients who are going on our clinical trials program so that we capture a larger proportion of the population in what we consider the state-of-the-art experimental protocols, then when we do something new and effective as I mentioned earlier in colon cancer, it reaches a larger number of people.

We think by doing that and by disseminating what we already know we can reduce mortality by about 10 percent in this country with existing therapy without counting some of the new things I alluded to in my opening statement.

So, I believe we are on target. I should mention the SEER Program, the Surveillance, Epidemiology, End Results Program, that determines the incidence of mortality and survival data for the country and was started in 1973 by the Cancer Institute. We use SEER to monitor our progress and we look at the data on an annual basis.

It is the source of all the statistics that let us know whether or not we are succeeding or failing. For example, the decline in mortality under the age of 55 is detected in that program as well as the rising mortality above the age of 65, SEER shows areas of progress and identifies problems for us to go after so that we can more easily achieve our goals.

NIAID AIDS TREATMENT EVALUATION UNITS

Senator CHILES. Thank you.

Dr. Fauci, your statement includes a mention of about 19 AIDS treatment and evaluation units and institutions throughout the country. Do you have such a research unit in Florida?

Dr. FAUCI. Yes; we do. It is in Miami. Dr. Margaret Fischl is the principal investigator, along with Dr. Wade Parks, who is also associated with that AIDS treatment evaluation unit.

Senator CHILES. What promising treatment therapies have you identified in this kind of research work?

Dr. FAUCI. There have been a number of them. The one that is receiving the most activity now, Mr. Chairman, is azidothymidine, AZT. This drug was originally studied, as I mentioned this morning, in the

intramural program of the National Cancer Institute in collaboration with a few other institutions.

That drug is now being studied in larger trials in patients with other forms of AIDS. The original study on AZT was in AIDS patients with *Pneumocystis carinii* pneumonia. Currently, there are protocols being implemented in a number of the 19 evaluation units in patients with AIDS and Kaposi's sarcoma.

The protocols involve a range of doses of AZT in AIDS patients with *Pneumocystis carinii* pneumonia, AIDS in pediatric populations, and, most recently, AIDS patients with dementia complex. We also now have protocols written to look at the effect of AZT in combination with other agents such as alpha interferon, dihydroxypropoxymethylguanine, DHPG, and soon we will be studying AZT with acyclovir.

As soon as the dideoxycytidine compound, which is also being studied in the intramural program of the National Cancer Institute, becomes ready for more widespread study—and I believe this will be within the next few months—we will then also include that protocol in our treatment evaluation units.

So, there is a whole series of studies. I might add that the NIAID treatment evaluation units will serve as the clinical trial arm of the drug development program for the National Cancer Institute as well as for the National Institute of Allergy and Infectious Diseases.

Thus, we have a mechanism to try the drugs that are currently being developed and screened.

Senator CHILES. All right, sir. I understand Senator Harkin has a question or so he wants to ask. I would be happy to take him right now.

NATIONAL CHOLESTEROL EDUCATION PROGRAM

Senator HARKIN. Thank you, Mr. Chairman. I have two questions, one about cholesterol and the other about dealing with Parkinson's disease.

Dr. Lenfant, over the past 15 years the National High Blood Pressure Education Program has succeeded in being recognized as the jewel among demonstration and education programs. Through lessons learned, they established the National Cholesterol Education Program last year.

Will you please tell us how this cholesterol program is doing.

Dr. LENFANT. Yes, Senator Harkin. We initiated this National Cholesterol Education Program approximately 2 years ago. That was just a few months after the release of what we consider to be the definitive study showing the association between blood cholesterol and risk of coronary heart disease.

Prior to the release of this study, and again just 6 months or so ago we conducted a survey from the public and from practicing physicians, to determine whether attitudes and beliefs regarding blood cholesterol have changed since the education program began. I must say, that the cholesterol education program already has had some impact.

Indeed, we were pleased to note that many more Americans today are informed about cholesterol, know what it is, know what needs to be done to reduce it if it is high, and perhaps more importantly are conscious of the fact that if they have an increased blood cholesterol they should see their physician.

ACCURACY OF CHOLESTEROL TESTS

Senator HARKIN. Did you read the couple of articles recently that appeared in the Wall Street Journal?

Dr. LENFANT. Yes, indeed.

Senator HARKIN. One of those articles pointed out that many of the testing machines that doctors have in their offices for cholesterol just are not very accurate. In fact the writer of that article had a control sample—he had his blood taken, had it tested against a good control sample, and sent his blood sample to five different other doctors' offices or testing places and got back five different levels of cholesterol.

I think, if I remember the story right, the spread ranged up to about 500 percent off.

Dr. LENFANT. Yes.

Senator HARKIN. Well, now, I have since talked with doctors here and other places about that and they also are concerned that doctors are doing these cholesterol checks with machines that just really are not accurate.

Dr. LENFANT. Well, I think what was said in the Wall Street Journal article a few weeks ago is abolutely correct in the sense that the reliability of this measurement is open to question. We are so much aware of that, that at the present time and for approximately 6 months, the Institute is working with a group of experts to establish some standardization guidelines for the laboratories measuring blood cholesterol.

This group of experts will report within the next few months and we hope that indeed this exercise will lead to a better method for the measurement of blood cholesterol. There is no question that in many private offices, and I would say laboratories in some communities, the results today are open to question.

I think there are lots of things which are going on to improve that. You probably remember from this article in the Wall Street Journal that many instrument companies are developing devices which are being tested. The reliability of these measurements is improving and will continue to improve until we have an almost absolute comparability between the various laboratories.

MEANING OF CHOLESTEROL MEASURES

Senator HARKIN. Let me say two things on this education program. One, I find not every one, I find a wide disparity in doctors' and the public's approach to the cholesterol problem—some who do not think it is a problem, some who say that 300 is not too high, some who say that 250 is not too high.

I just find them all over the place on this issue.

Senator CHILES. How do you find them between HDL and LDL?

Senator HARKIN. There are still some doctors who say as long as that ratio is there, which used to be the old theory——

Senator CHILES. A lot of them are still talking about just one.

Senator HARKIN. Well, we know that is different, that there is HDL, LDL, plus the triglycerides that provide about 20 percent of the LDL's. I think what you are saying is, they do not tell you what your HDL or your LDL is.

Dr. LENFANT. If I may say something, LDL and HDL are very different compounds. LDL is said to be the bad cholesterol. The HDL is said to be the good cholesterol.

Senator HARKIN. Yes; I think we are both quite well aware of that.

Dr. LENFANT. It is absolutely correct that many physicians express the blood cholesterol status of a patient as a ratio of both, that is, the LDL over the HDL. Many other physicians will talk only in terms of total cholesterol which includes those two, HDL and LDL.

What you said about physicians needing to be more informed, because sometimes they are behind the public, is absolutely correct. I could cite to you that in our 1983 survey only 39 percent of the physicians believed that there would be a reduction in the risk of heart attack by reducing the cholesterol level, whereas 64 percent of the public believed that that was the case.

Now, in the survey that we conducted at the end of last year, 1986, that number of physicians had increased from again 39 percent in 1983 to 64 percent. So, we had almost doubled the number of physicians who believe that there was an association between cholesterol level and the risk of heart attack.

Senator HARKIN. That is moving in the right direction, anyway. If you have anything else on the cholesterol education program, if you have any written materials, if you would get those to me I would surely appreciate it.

Dr. LENFANT. Yes, sir; we will send that to you.

Senator HARKIN. I want to ask a question on Parkinson's disease, but maybe I should ask that tomorrow.

Dr. WYNGAARDEN. Dr. Goldstein will be here tomorrow representing the Neurology Institute.

Senator HARKIN. That would be the person I should direct that to, on Parkinson's.

Dr. WYNGAARDEN. Probably, yes.

Senator HARKIN. Thank you, Mr. Chairman.

ORAL DISEASE PREVENTION FOR OLDER AMERICANS

Senator CHILES. Thank you.

Dr. Löe, you have given us these figures showing how well we are doing with the children, and even in a middle-aged group. What are the appropriate preventive measures now for the elderly? I assume that the numbers, the reason we have got those higher numbers there, is be-

cause they missed the early, the fluoridation and those kinds of things that are taking place now.

How do we help them now?

Dr. LÖE. Mr. Chairman, I think your notion is right on target. This is a population that was born and raised before the Second World War. They were subject to a different type of dental care.

They did not have access to the preventive methods that we have today, and there may be several other factors involved. However, I think it would be foolhardy to assume that the oral diseases we see in older Americans is only a cohort effect—you know, as if those who are 35 today would move into their forties and fifties and sixties and just by moving along with their own healthy dentition, would end up in the ranks of the elderly with all their teeth and with the good dental health that we see in the young today.

There are other factors in the development of tooth decay and periodontal diseases that may relate to the process of aging itself. We see this in terms of root surface caries—a disease that you do not see in young people but you know, increases with age.

The periodontal diseases are infectious diseases that also involve immune defense mechanisms against the disease. To what extent these immune responses change over the years and are affected by the aging process, we really do not know.

Over the past 40 years the Dental Institute has focused on the prevention of dental diseases in children and young people. I think we have accomplished quite a lot in that area over that time.

As we see it, the adult survey points to the need to focus more attention and emphasis on oral and dental diseases in the mature adult and in the elderly, and to determine to what extent we need specific preventive approaches appropriate to control diseases in these age groups.

BLOOD SHORTAGE

Senator HARKIN. I have got to come back to Dr. Lenfant. The chairman wanted to ask this question, and I will for the record.

Dr. Lenfant, while last year approximately 3.8 million Americans received transfusions of whole blood or blood products, today we hear of a national emergency due to severe blood shortages. What changes have occurred to cause a severe shortage of blood supply?

No. 1, does it have any relationship to the public's fear of AIDS? No. 2, is the National Heart, Lung, and Blood Institute doing anything to help meet this crisis?

Dr. LENFANT. You are asking a complex but very serious question. To put it simply, it is true that the blood supply in this country is in trouble. It is in trouble for two reasons.

On the one hand we are witnessing an increase in blood utilization for a variety of reasons, in part because of new surgery procedures which are frequently being performed. For instance organ transplantations, which are more commonly done today than a few years ago, require lots of blood, as well as new treatment of burns and treatment of severe anemias and so forth.

So, the utilization of blood is increasing but at the same time we are witnessing a decrease in blood donations and that results from a variety of causes. First of all, there is no question that the AIDS tragedy has influenced blood donation a great deal for many people. In fact, surveys have shown that 1 out of 3 Americans believe that there is a risk of contacting AIDS by giving blood. Of course, we all know that that is not the case, but that is very much entrenched in the mind of many people.

The second reason is that in addition to AIDS, there are a number of other diseases which are transmitted by blood, for example, a form of hepatitis which is called hepatitis non-A, non-B, for which there is no test to detect it.

HEPATITIS TESTS

Senator CHILES. What are we doing to work on a test for that?

Dr. LENFANT. There is lots of research going on in our Institute; there is also much research in the National Institute of Allergy and Infectious Diseases.

Senator CHILES. What is the prospect for that? I happen to be a victim of that hepatitis in blood transfusion.

Dr. LENFANT. Pretty good.

Senator CHILES. Danny Kaye just died from that.

Dr. LENFANT. He died from complications of hepatitis, which he contracted from a blood transfusion. This is going to greatly influence the attitude of the people. I should say, Mr. Chairman, that there is a test to detect non-A, non-B hepatitis which is utilized by all the blood banks in this country. The problem is that because it is a surrogate test, the number of false positives is relatively high. This leads to discarding blood after it has been collected. That further compounds the problem that we were mentioning earlier.

Senator CHILES. My understanding, and this again gives me some concern, you have a situation in which someone contracts hepatitis from a transfusion and then you are told the blood bank cannot refuse blood from the donors, and you get more than one transfusion—maybe you will get a number of units of blood.

Say you get eight units of blood. From one of those eight units you contract hepatitis but they are saying there is no way then to screen out those donors, so that same donor, if it is a professional donor, is right back donating again and may be infecting other people.

Dr. LENFANT. This is correct in the case of non-A, non-B hepatitis because again, as I said earlier, there is no absolute test. However, today, relative to AIDS, the risk of getting AIDS from blood transfusion is 1 per 1 million.

Senator CHILES. So, you have a legitimate test for AIDS but you do not for hepatitis non-A, non-B?

Dr. LENFANT. This is absolutely correct, and it is all these elements together which are leading to blood shortages.

Senator CHILES. So again, hemophiliacs are out there very much concerned about that.

Dr. LENFANT. That is absolutely correct.

Senator CHILES. Dr. Fauci, can you tell us anything else?

Dr. FAUCI. There is sometimes a misconception about non-A, non-B hepatitis. In this case, we have something for which we do not have a test. Dr. Lenfant mentioned that we have a test for the antibody to the AIDS virus. It is, therefore, easier to screen that out of the blood. We do not have a test for non-A, non-B hepatitis, so it is identified only because it does not react in tests for hepatitis A and B.

We are doing a lot of aggressive research to try and determine the virus which causes non-A, non-B hepatitis. Once we do, very soon thereafter we should have a good, very sensitive test for non-A, non-B.

Unfortunately, since we have not been able to isolate the virus that causes non-A, non-B hepatitis, even though we have given it a name, we will not be able to test for it until it has been isolated.

Senator CHILES. Non-A, non-B just means——

Dr. FAUCI. We do not know.

CHOLESTEROL LOWERING DRUGS

Senator CHILES. It is anything else other than A or B but you do not know what it is.

Dr. Lenfant, in your full statement, you were talking about the work that has recently been done in cholesterol suppression that has been published, the Nobel prize. How is that going forward in the clinical testing and are there side effects?

My understanding is you had certain drugs that seemed to reduce cholesterol but at the same time they usually had major side effects so you were reluctant to prescribe them.

Dr. LENFANT. At the present time there are two main categories of drugs which can lower blood cholesterol. One acts by absorbing the cholesterol which is in the intestines.

This type of drug has been available for a long period of time. In fact the studies that I was making reference to earlier were conducted using one of these drugs. These drugs are called sequestrants. What they do, again, is to absorb the cholesterol which is in the intestine.

The other type of drug has been developed following the basic work for which Doctors Brown and Goldstein received the Nobel prize last year. These drugs inhibit enzymes which are necessary to the synthesis of cholesterol in the liver.

The first category of drugs, the sequestrants, again has been used for many, many years. It has been approved by the FDA. The second type of drugs, the ones that inhibit the enzymes necessary to the synthesis of cholesterol, is not yet approved by the FDA.

The expectation is that these drugs will be approved in a matter of 2 to 6 months. At the present time a number of clinical trials have been and are being conducted in this country. I believe that as many as 2,000 patients with high blood cholesterol have taken one of these drugs very successfully.

Just a few minutes ago we were talking about the Wall Street Journal. I would like to refer again to this Wall Street issue and to the New York Times today because both had a very lengthy article about these types of drugs which are again being tested and I am sure will be approved by the FDA very soon.

The point is that once these new drugs are available, the control of cholesterol in patients will be certainly much easier than it is today. I should underscore, however, that all physicians expert in this area, and the Institute will tell you, that the first line of attack against blood cholesterol should be diet before there is pharmacological intervention.

There was an article today in the New York Times which described how all the drugs work, and how efficient they are in lowering cholesterol.

TREATMENT OF GALLSTONES AND KIDNEY STONES

Senator CHILES. Dr. Gorden, in your opening statement you report on a new method for dissolving cholesterol gallstones, which offers the promise of reducing the $2.5 billion spent annually on gallstone surgery, and you cite a possible saving of $645 million per year for a new drug therapy for kidney stones.

Can you tell us a little more about that?

Dr. GORDEN. Yes; with respect to gallstones, at the present time gallstones basically are treated by surgical techniques to remove gallstones where that becomes necessary. The new technique would basically involve a solvent-type compound, which could be inserted by a small catheter into the gall bladder and allowed to sit for a period of time, and essentially the gallstone will dissolve, at least certain forms, primarily cholesterol gallstones will dissolve in this particular solvent.

The catheter can be removed, and should there be a recurrence the gallstone can be treated again in the same way. Now, this treatment will have to undergo a considerable amount of additional testing before it is used on a large scale, but should it become safe and effective on a large scale it will save an enormous amount of money over the surgical treatment that we described, as well as reducing the morbidity of surgery for gall bladder disease.

With respect to kidney stones, the issue here is one of prevention. There is a rather simple compound that is being used and administered to patients, primarily those individuals who are frequent stone formers.

Some people tend to form stones on a very regular basis, and it is that group that is being specifically targeted. It has to do with increasing the solubility of calcium in the urine and preventing kidney stones from forming under those circumstances.

So that, this now appears to have a great deal of promise in preventing kidney stones, and as I say we are very hopeful about the gallstone treatment for those people who already have stones.

Senator CHILES. Which is it, kidney stone or gallstone that they use the ultrasound?

Dr. GORDEN. It is the kidney stone.

Senator CHILES. Kidney stone?

Dr. GORDEN. Yes, sir.

Senator CHILES. But this would be for people that, as you say, keep making those stones?

Dr. GORDEN. Yes, sir; the technique that you mention will be the treatment of choice.

PROSTATIC DISEASE

Senator CHILES. With the incident of the President's operation we have all been reminded of the importance of prostate problems for men. Are there any new developments in that area?

Dr. GORDEN. Yes, sir; the problem here, of course again is somewhat like the gallstone problem. There are methods of treatment and good methods, surgical methods of treatment.

But the problem here really is to try and prevent or at least minimize this phenomenon which seems to be something that happens in every man, and the major progress here is in trying to understand why particular parts of the prostate can enlarge in a certain direction and obstruct the urinary stream, but can also enlarge in another direction and cause no problems.

Why it enlarges in a particular direction or in particular foci or places is really an area of very intense investigation and this line of investigation really cuts across a number of areas. It involves specific growth factors. We now have at least two laboratories which have isolated what appear to be prostate specific growth factors which can regulate the local growth of cells. This is a very exciting research advance.

The growth factors do not necessarily have to act within the whole gland or within the whole body. They can act within a very limited area within a very small number of cells, and may very well be responsible for this kind of misdirected growth, which is, in fact, what causes the problem in the first place.

So, this is an area that has brought in a lot of new investigators, where there really is an interdisciplinary approach to try and address this problem, and I think we can expect some promising things in the next several years.

THE OLDEST OLD

Senator CHILES. Our fastest growing population group in Florida, Dr. Williams, and in the country is the 85 and older, often referred to as the frail elderly or the old-old. What studies do you plan or have underway that address the special needs of this population?

Many of this group are or could become senile or widowed women who often live alone. What research has been done to address the psychological needs of the group as well as the obvious physiological concerns?

Dr. WILLIAMS. Mr. Chairman, our Institute certainly sees this group as the most vulnerable of older people, and probably one of the most

vulnerable of any group in our society. We have undertaken several initiatives over the last several years and are continuing to do so. One of our most important goals is to develop a better picture of just exactly what the characteristics are of this part of our population.

Until very recently, most of the data collected by the Bureau of the Census or National Center for Health Statistics have lumped people over the age of 65 all into one category. Now, with NIA support both of these agencies are now doing more discriminatory separation of the data so that we can actually look at the characteristics of the age 85 and older population.

In these and other studies we are obtaining increased samples of this population than has been available in the past. Another important initiative in this area has revolved around the question of so-called active life expectancy, that part of the later years that can be expected to be healthy and independent, and conversely, what part of declining years may be dependent years where one needs help from other people because of various disabilities.

What we obviously hope we can achieve is a more prolonged active life expectancy and a shortening of the dependent years. We have just gone through a cycle of inviting special research applications to try to define better the facts on active life expectancy versus dependancy in the late years of life.

We are also supporting studies dealing with another question you addressed; that is, the question of loneliness and the differences in people living alone versus those living in families or in a group environment, and the issues that come up there.

There is some evidence already that people, even those who are fairly disabled, who live alone and use resources one way or another to do that, may actually maintain more independence than those who live in a family situation. It is not at all clear, what are the ultimately best arrangements for maintenance of good health and independent living in late years. We are pursuing all these issues under some of our initiatives.

FOREIGN SCIENTISTS

Senator CHILES. Through the activities of the Fogarty International Center, NIH is able to take advantage of the research expertise of the more than 1,950 scientists from about 65 countries. Should these foreign scientists be counted as part of the NIH personnel ceiling?

Dr. WALLACE. While some of the foreign scientists at the NIH are counted as part of the ceiling, whether or not they are counted depends on the category in which the scientist is considered. All foreign scientists play a very integral and necessary part of the NIH. Some one-third of those scientists are foreign guest investigators. They are fully supported by nonappropriated funds. They are here as our guest, and work in concert with our ongoing research activities.

Senator CHILES. Is that under the ceiling?

Dr. WALLACE. May I furnish the exact figures for the record?

Senator CHILES. If you would furnish that for us and show us the breakdown of who is in and who is not, and give us a rationale.

Dr. WALLACE. I would be very happy to do so.

[The information follows:]

FOREIGN SCIENTISTS

During fiscal year 1986, 972 foreign scientists participated in the Visiting Fellows' Program. Visiting fellows have less than 3 years' postdoctoral research experience. Because these participants receive fellowship awards and come to the NIH for practical research training, they are not counted in the ceiling. There were also 551 foreign guest researchers at the NIH during fiscal year 1986. These scientists are supported by home institutions, foreign and domestic foundations, and other nonappropriated funds; they are typically at the NIH for short periods of time to initiate collaborative international projects. Such foreign guest researchers are not counted in the ceiling.

Visiting associates have from 3 to 6 years' postdoctoral research experience; visiting scientists have more than 6 years' postdoctoral research experience prior to coming to the NIH. During fiscal year 1986, there were 276 visiting associates and 145 visiting scientists in the NIH visiting program, and 22 foreign special experts. These scientists perform services for the NIH and are counted in the ceiling.

U.S. SCIENTISTS WORKING ABROAD

Senator CHILES. How many U.S. scientists do we have overseas as part of this program? Has there been difficulty in placing more U.S. scientists abroad?

Dr. WALLACE. There were actually 85 U.S. scientists overseas in four different NIH programs in fiscal year 1986. Further, there are a number of opportunities for U.S. scientists to go abroad that are not fulfilled.

We do not have difficulty in placing scientists abroad. If there is any difficulty, it is in persuading scientists to go abroad.

Senator CHILES. So, there is no difficulty in having host countries receive them?

Dr. WALLACE. No; and there are an increasing number of programs all the time. Furthermore, we are encouraging a number of governments, primarily through their medical research councils, to sponsor Americans to work abroad. Presently, there are nine programs in nine countries. We are working with other countries and expect to increase this number.

QUESTIONS SUBMITTED BY THE SUBCOMMITTEE

Senator CHILES. Very well. Well, we have some additional questions that we will submit for the record, and Senator Weicker has some; Senator Bumpers has some, and perhaps several of the other Senators.

We thank you very much for your appearance.

[The following questions were not asked at the hearing but were submitted to be answered for the record:]

Questions Submitted by the Subcommittee

CANCER TRENDS - WHAT CAN BE DONE

Question. I was encouraged to see that there has been a 20 percent increase in the survival rate of cancer since the 1940s and now that 50 percent of all cancer patients are curable. This year again the National Cancer Institute reported a slight decline in the cancer death rate for the population under 55 but it is troubling to see that there is a slow increase in the cancer incidence rate in this age group.

Even more troubling, however, is that cancer rates have risen for people 55 years and older -- the group that accounts for the majority of all cancer deaths -- and that the cancer death rate over all rose 4.2 percent from 1975 to 1984.

Last year NCI issued a plan that could reduce the annual cancer death rate by as much as 50 percent by the year 2000. The plan recommends diet changes, massive reductions in smoking, increased medical screening and nationwide application of state-of-the-art methods of treatment.

What efforts are underway by NCI to help implement this plan?

Answer. Before discussing our plans toward meeting the goals for the year 2000, I would like to address the statistical profile of cancer and its implications for the program. Indeed, the cancer death rate did rise by 4.2 percent from 1975 to 1984. It is important, however, to examine the constellation of different cancers that make up this disease in order to assess fully the areas of progress, the areas of promise, and the areas in which we are not making advances. We feel that it is particularly important to distinguish lung cancer from other cancers. The disease has a relatively low five-year relative survival rate (about 13 percent for all races combined, compared with a rate of 49 percent for all cancers and all races combined). It has the highest incidence rate of all cancers, making it the most likely cancer to develop and it also has the highest mortality rate of all cancers; indeed, lung cancer accounts for about twice as many deaths per year as colorectal cancer, the next largest cancer-related cause of death.

The important point regarding lung cancer is that approximately 85 percent of the cases of lung cancer are preventable, by not smoking cigarettes. Since prevention of the disease is feasible we track our progress with lung cancer primarily, but not exclusively, in terms of the rate of new cases per year, and in the rate of deaths from lung cancer. We have seen progress in the younger age groups in terms of reduced lung cancer mortality and have recently seen the overall incidence rate from the disease (for white males) begin to decline. We conclude that the reduction in cigarette smoking since the 1960s is showing signs of success; our strategy to effect even greater reductions in cigarette smoking is to address the needs of specific groups of smokers both through a nationwide effort to provide information on how to quit and an extensive research program to develop even more effective quitting strategies.

Turning to all other cancers, we find that the overall mortality trend for all other cancers has remained constant, but that the rate for younger Americans under age 65 has declined. The rate for persons over age 65 is, however, increasing. Yet the rate of increase in mortality was less than the rate of increase in incidence, indicating progress in the treatment of the disease. The rise in incidence in persons over age 65 is not completely understood, although some may be due to the effects of cigarette smoking (on cancer sites other than lung) and a portion may be due to a diet increasingly higher in fat.

The reduction in mortality in younger Americans is a very hopeful sign and correlates with the advances observed in treatment and with the efforts of the National Cancer Program to bring the state-of-the-art in cancer treatment and prevention to the public.

Our goals for the year 2000 -- to reduce smoking, to reduce dietary fat and to increase dietary fiber, to increase breast and cervical cancer screening, and to improve the application of the state-of-the-art cancer treatment -- are predicated on the knowledge we have available now, and the knowledge, particularly related to treatment, that we can be expected to acquire in the next several years.

Turning first to prevention, the goals are being addressed through a variety of research and application programs. The Nationwide Prevention Awareness Program is actively bringing information to the public and to the medical community on diet and cancer and, of course, about smoking. While smoking is well-known to be responsible for some 30 percent of all cancer deaths it is less well known that diet contributes substantially to about 35 percent of all cancer deaths. High-fat and low-dietary fiber appear to be the major causal factors in the relationship although the clinical trials necessary to prove that dietary change is effective have not yet been performed. However, a variety of evidence from international epidemiological and animal studies points in this direction. The NCI feels that the existing evidence is sufficiently strong to recommend prudent actions toward dietary change.

Along with the prevention awareness program, NCI has mounted an intensive research effort to more fully understand the complex relationships between diet and the initiation and progression of cancer. A large chemoprevention program has been developed to explore the relationship between specific dietary components and cancer, along with the development of animal models which are particularly important in simulating the effects of diet. A test of the breast cancer and dietary fat hypothesis is now in its feasibility stage. The clinical trial will be the largest dietary study ever conducted, and will involve some 30,000 women in a controlled clinical trial of the impact of a low-fat diet on the incidence of breast cancer. Other research is underway to find the most effective means of bringing this information to the public. For example, NCI in conjunction with a local supermarket chain, has launched a demonstration on how best to present diet and cancer related information in the supermarket and through food industry print and other advertising.

The NCI Smoking and Tobacco Research Program is sponsoring research on how to reduce or stop smoking and to prevent children from smoking. The research is highly coordinated and involves researchers from across the country. A particularly interesting and important component of the program is a clinical trial involving 10 pairs of communities in an effort to reduce smoking among their citizens. The trial is complemented by other facets of the program related to the media, self-help techniques, the significantly expanded involvement of health professionals and a school-based program of smoking prevention.

These programs are coupled with a variety of research projects underway through NCI's investigator-initiated research that cover the gamut from clinical trials to demonstration and evaluation studies -- all aimed at cancer prevention using basically the information we have today.

The program related to the screening and the treatment portions of the plan centers on the translation of effective new technologies to the public. The first line of information is the NCI's Cancer Communication System (CIS). This nationwide information source is available to the public 24 hours a day through the toll free number 1-800-4-CANCER. The CIS operators are trained to provide the information the public needs to make informed decisions regarding cancer. The operators draw upon the NCI's Physician Data Query System (PDQ) that represents a dynamic compendium of state-of-the-art cancer treatment. The system is primarily for physicians who use it to identify clinical studies that may be suitable for their patients, as well as a reference to the state of the art in cancer treatment. Physicians may be involved in a variety of state-of-the-art cancer research conducted through the auspices of a Clinical Cooperative Group or through the network of Community Clinical Oncology Programs (CCOPs) that enable physicians to participate directly in clinical research in their practice communities.

The Institute's Cancer Control Science Program has taken a number of initiatives that are vital to the success of achieving the year 2000 goals. First, the program has developed a series of initiatives for working with the states on identifying their particular needs related to cancer control and developing State cancer control plans. Along with these initiatives is a set of research projects aimed at identifying avoidable mortality due to cancer and formulating and testing ways of reducing mortality. In addition, the program has placed high priority on working with communities that have particularly large needs due to cancer. Perhaps of most importance is the black community with a mortality rate in males some 30 percent higher than that of the white population.

Resources Needed to Meet the Goal

If we are to fulfill our goal of 50 percent mortality reduction, we must meet our objectives in the four areas just outlined -- smoking prevention and cessation, dietary modification, early detection of cancer through effective screening, and widespread application of the latest cancer treatment regimens. Successful completion of these four objectives will be dependent

upon a network of cancer control resources, the framework of which is already in place. Critical components of the network are the cancer centers, the clinical cooperative groups, the Community Clinical Oncology Program, and the Cooperative Group Outreach Programs which are associated with the cancer centers and the clinical cooperative groups, the SEER program which tracks cancer incidence, survival and mortality in the U.S. population, and the PDQ information system.

Briefly, major resources aimed at meeting the year 2000 goals include the following:

- Cancer centers - The Cancer Centers program constitutes a network of excellence in high-quality laboratory, clinical and cancer control research, and provides training grounds for young scientists and clinicians to enter the broad community of cancer research and medicine. Centers are designed to direct and apply research findings promptly to clinical and community situations where there is excess cancer incidence and avoidable mortality. The President's Cancer Panel and other NCI advisory groups have joined with NCI staff to address the question of how to maximize the benefits that may be obtained from these center resources and increase the cancer control opportunities in the communities proximal to the centers. Special consideration is being given for new centers to underserved geographic regions and underserved patient populations where the availability of state-of-the-art clinical research should lead to the diffusion of better treatment into the community.

- Clinical Cooperative Groups - Much of the improvement in survival data which has occurred in the past decade can be traced to widespread participation of cancer patients in clinical research protocols. The Clinical Cooperative Groups are at the core of this activity, developing and conducting a wide variety of clinical research. To provide more cancer patients access to the most sophisticated treatments and to ensure a wide impact of the most recent advances in treatment, future emphases will include an increase in the clinical research capacity and patient accrual of the cooperative groups. We expect that the groups will testing new anticancer treatments (such as novel drugs with antiviral and tumor differentiation capacity, biological response modifiers and new radiation therapies) as well as studies of important surgical adjuvant therapy. Through the Cooperative Group Outreach Program, special emphasis is being given to link community physicians with the cooperative groups.

- Community Clinical Oncology Programs (CCOPs) - CCOPs support both clinical and cancer control research directly by community physicians and their community hospitals affiliated with clinical cooperative groups and cancer centers. As noted above, the CCOPs are intended to broaden and amplify the nation's base of cancer research and the transfer of new information from clinical research to the community oncologist. They are also intended to increase

the number of patients in local communities entered in NCI-funded research protocols. With more patients entered into research protocols, clinical trial data could accrue more rapidly and hasten the development of proven treatment and prevention intervention strategies. The program is being expanded in 1987 to emphasize other cancer control research, such as cancer prevention, early detection, pretreatment evaluation, patient management, continuing care, and rehabilitation.

- Cooperative Group Outreach Program (CGOP) - The program links the clinical cooperative groups to community-based physicians in order to broaden participation in NCI-sponsored clinical trial research. Similar to the CCOP, this program is based on the premise that participation in clinical trials research can provide continuing education for community physicians and will stimulate improvements in the quality of care for cancer patients in the community. Support is being targeted to clinical research in organizations with access to substantial minority populations. Improved treatment of underserved populations is crucial to achieving the year 2000 goal.

- Surveillance, Epidemiology and End Results (SEER) Program - This program which has been in place for over 10 years, is a network of population-based cancer registries. SEER monitors cancer incidence, mortality, and survival and is the key to monitoring progress toward the year 2000 objectives.

All these efforts serve to complement the NCI basic and clinical research program. Together they focus the nation's biomedical resources on both the prevention and treatment of cancer. With the enormous expansion in knowledge about cancer over the past few years, and the effective application of our current knowledge, there is every reason to be hopeful about the future.

PRIORITIES: CAUSE AND PREVENTION OR TREATMENT?

Question. Last year the Congress increased the Institute's budget 14 percent to a total of $1.4 billion, and with that increase NCI increased cause and prevention research 12 percent and treatment research 20 percent.

Why do you apparently place higher priority on treatment research than on cause and prevention research while the cancer incidence rate is still going up?

Answer. The distribution of funds within the cancer program has always been one of balance -- trying to achieve the proper research balance between basic research and the application of its successes to benefit the American people. Based on scientific opportunities and the advice of our advisors we are constantly examining program priorities and the resultant funds distribution. The specific increase you have identified reflects the emphasis provided by the Congress in 1987 wherein funds were allocated for a needed expanded clinical trials effort.

It is important to note that a major portion of the Institute's prevention effort is accomplished through the Cancer Prevention and Control program. Currently, almost 70 percent of the resources devoted to this $62 million program, is prevention oriented. These are, in addition to the funds identified within Cause and Prevention research. Therefore, the total prevention effort for the Institute approximates $392 million for 1987.

CANCER: A SPECIAL PROBLEM IN THE AGING

Question. Cancer is the foremost public health problem in the State of Florida affecting more than 50,000 residents a year and causing approximately 26,000 deaths. Two-thirds of these cases will be among the elderly. Because of the high proportion of elderly among the State's population, new cancer cases average 475 per 100,000 persons compared to the rate of 361/100,000 for the U.S.. To what degree are the research activities of the National Cancer Institute directed toward prevention and treatment of cancer in the elderly population?

Answer. We are conducting a group of studies focusing on Patterns of Care for Elderly Cancer Patients. We know from our SEER program data that approximately 50 percent of all cancers occur in persons aged 65 years and older, and the probability of developing cancer increases with age. In spite of this, relatively little is known about how the problems of old age affect cancer patient workup, treatment, and care. Medical decisions are influenced not only by cancer signs and symptoms which patients present, but also by other health difficulties; chronic disabilities; and social, psychological, and economic handicaps they may experience. To address this complex array of influences, NCI issued a research initiative in consultation with the National Institute of Aging (NIA). Nine awards were made to investigators in fiscal year 1984 to study patterns of care for elderly cancer patients. Two studies were recently completed; those remaining are in their final year of activity.

The research includes studies on 1) elderly patients with lung, breast, or colorectal cancer where age, performance status, medical management, and psychosocial, emotional, and economic factors are considered; 2) health care utilization patterns associated with a diagnosis of cervical cancer; and 3) the social and psychological adjustment to cancer by elderly patients. Frequency of cancer symptoms in a representative sample of older persons, responses to the symptoms, and the role support networks play in those responses to the symptoms have also been studied. Results from these projects are providing the data needed for future program planning. The investigators are publishing important details on the management of cancer in the elderly in the cancer epidemiologic and treatment literature.

DOES TOBACCO SMOKE PUT US ALL AT RISK?

Question. In Florida, lung cancer accounts for 28 percent of all cancer deaths each year. Cigarette smoking is responsible for 85 percent of the lung cancer in men and 75 percent among women, or over 83 percent overall.

There has been a great deal of attention given recently to the hazards of cigarette smoke in non-smokers. To control smoking in public places, in 1985 Florida passed the Clean Indoor Air Act which limits smoking in all state and local government buildings, hospitals, educational facilities, theaters, grocery stores and places of employment.

In your General Statement, you identify certain compounds found in cigarette smoke as tumor promoters that do not cause cancer directly but facilitate the cancer process.

Can you explain to me in more detail how cancer initiators and promoters interact to develop a cancer? In the case of cigarette smoke as a promoter, would the non-smoker have to first be exposed to an initiator, such as radiation, to be at risk? Or, in your opinion, does exposure to cigarette smoke alone present a substantial risk?

Answer. The concept of tumorigenesis as a multistage process originated from studies of skin tumor formation. The now formalized concept uses the terms "initiation" and "promotion" to denote, respectively, 1) the production of potentially tumorigenic cells by limited exposure to an agent called "initiator" and 2) the completion of the cancer transformation as the result of subsequent treatment with agents called "promotors" that are not intrinsically carcinogenic.

When the initiator comes in contact with the cell, there is a change in the genetic makeup of the cell and it can then be considered a dormant tumor cell. It may remain in this state with no further change for the duration of its life. However, if a second agent, the "tumor promoter," comes in repeated contact with the cell, a further change can occur which causes further cell division to produce cancer cells. These multiply and can go on to become an invading cancer. Initiated cells can be formed by many different agents (initiators) such as various chemicals, viruses and irradiation.

Cigarette smoke has been shown to contain both chemical initiators and promotors. Indeed, the smoke, when used in animal skin experiments, shows a greater carcinogenic effect than the sum of the know major harmful chemicals when tested separately. Since cigarette smoke contains initiators and promotors, it is not necessary for a person to be exposed to other specific agents in order to be at risk.

Cigarette smokers have an increased risk of cancer of the esophagus, pancreas, kidney, and urinary bladder. Since cigarette smoke does not come in contact directly with these organs, except for the esophagus, mechanisms other than contact carcinogenesis are involved in the pathogenesis of these cancers. Several hypotheses can be postulated for such an effect, such as: 1) cigarette smoke contains organ-specific carcinogens and agents that give rise to <u>in vivo</u> formation of carcinogens; 2) cigarette smoking may shift the metabolism of dietary components toward <u>in vivo</u> formation of carcinogenic metabolites or may induce enzymes that convert environmental carcinogens to their ultimate active forms.

Biologic evidence exists suggesting that the association of environmental tobacco smoke (ETS) and lung cancer is plausible and, in fact, causal. Non-smokers have been found to inhale and metabolize smoke constituents. The primary constituent of ETS is the smoke emitted by a smoldering cigarette, as opposed to mainstream smoke which has been drawn through the cigarette by the smoker. Over 2,000 constituents of sidestream smoke have been identified and many have caused cancer in laboratory animals. Compounds, such as nitrogen oxides, nitrosamines, carbon dioxide, methane, acetylene, ammonia, hydrogen cyanide, acetonitrile, pyridine, tar, toluene, phenol, pyrene, benzo(a)pyrene, aniline, acrolein, nicotine and carbon monoxide, are elevated in smoky environments. Thus, there is little reason to believe that sidestream smoke is any less harmful than mainstream smoke.

Within the past year, several reports have been issued evaluating the health effect of ETS in non-smokers. These reports, taken together, strongly supports the conclusion that ETS results in an increased risk of lung cancer. Epidemiologic studies of ETS and lung cancer have reported a range of values for the strength of the association. A weighted average of available results indicate that the lung cancer rate among those exposed to ETS is approximately 1.3-fold the rate in non-exposed persons. This value, however, may be an underestimate, since researchers have reported that even individuals purportedly not exposed to ETS have elevated levels of urinary cotinine, which is thus indicative of some tobacco exposure. One report suggests that the excess risk relative to a "true" non-exposed group is on the order of 1.4 to 1.8-fold.

The relationship of combined exposure to tobacco smoke and other agents is complex and only beginning to be evaluated. The most widely studied relationship is the joint effects of smoking and exposure to asbestos, where the lung cancer risk due to asbestos exposure is multiplied by the risk due to smoking behavior. One emergent public health concern is the impact on lung cancer risk of tobacco smoke and exposure to radon and radon daughters in the home. The National Research Council is considering the issues and a report will be published shortly.

ACCOMPLISHMENTS

Question. For your budget justification, an impressive list of accomplishments and areas for further exploitation can be found. The whole field of cancer research has never been more encouraging. I realize it may be a very tough question to isolate, but can you briefly describe those accomplishments which offer the most promise in dealing with the cancer problem?

Answer. It is indeed a difficult task to isolate only a few recent accomplishments which could be termed as "holding the most promise" in dealing with the problem of cancer. The investment in basic biomedical research since the passage of the National Cancer Act has yielded so much information about the functioning of the living cell that we have now reached a point in knowledge which would have seemed incredible only a few years ago. That is, we are really on the threshold of being able to interfere with the malignant process and either prevent its occurrence or halt its progression if already begun. In addition, this knowledge is

facilitating the development of new strategies for treating fully established malignancy. Perhaps most importantly of all, as these new developments are made, they are being quickly -- in some cases immediately -- utilized for the direct, practical benefit of the potential and existing cancer victim.

Some of the most exciting and promising major accomplishments with the most far-reaching implications include:

- Our investment in molecular biology has given us the opportunity to map and sequence the human genome. Scientists now have the powerful tools to size, sequence and scrutinize manageable pieces of DNA, the molecules of life which contain the genes. Researchers can isolate the ends of large DNA fragments and use them to probe and isolate additional ends of DNA further along the chromosome.

- A particularly significant discovery has been that normal cells can be transformed to cancer by oncogenes, contained in every living cell. When these genes are "initiated" or "promoted" by carcinogenic agents, the carcinogenic process can begin, usually ending in malignancy. A major part of the potential of this discovery is the exciting opportunity it offers to prevent cancer's development by interfering with the oncogene's protein products, which appear to trigger the cell's aberrant behavior.

- It is hoped that new drugs to inhibit oncogene expression may improve survival for cancer patients. It has been found, for example, that extra copies of oncogenes in the cells of cancer patients may be predictive of a poor prognosis; the presence of these extra oncogenes may have a direct effect on the method and length of treatment required for particular patients.

- Earlier forms of oncogenes, called "proto-oncogenes" are involved in normal embryonic development and cell growth. It has been found that these are kept in control by "anti-oncogenes", also recently recognized, which act to keep the cellular activity in check and operating normally. We now know that when these are somehow not functioning correctly, the oncogene has no natural suppressor regulating its functioning; if it is turned on, wild, aberrant growth will result. For example, recent studies indicate that osteosarcomas (bone cancer) and retinoblastomas (cancer of the eye in infants and children) have the same genetic change, or loss of a "regulator" gene which functions as an anti-oncogene. This knowledge can obviously lead to greater prevention, treatment, detection and diagnosis techniques.

- A new protein factor was discovered this year which promises to further unravel the mystery of metastasis, the process by which cancer is able to spread and invade, eventually killing its victim. Autocrine Motility Factor (AMF) is thought to play a significant role in development of the embryo, where it is quite appropriate for cells to migrate and differentiate. However it has also been found to be produced in large quantities by highly aggressive tumors, indicating

that it is instrumental in the process by which cancer cells are able to leave the original tumor, travel through the body and invade vital organs. Further research on the mechanism of action of AMF may allow us the develop a monoclonal antibody to it, thus producing the means to prevent cancer from spreading.

- "Antisense" compounds, which are complementary strands of genetic material designed to block the cancer message, are being developed. Recombinant DNA technology has made this possible, and NCI is hoping to develop treatments with new biological agents. NCI plans to explore the use of antisense RNA complementary to defined regions of HTLV-III as a possible new strategy for suppressing the virus that causes AIDS.

- Streamlined techniques are being developed to bind monoclonal antibodies to toxins or radioactive compounds so they can be carried directly to cancer cells while sparing normal tissue. For example, monoclonals have been developed which bind to and block the Interleukin-2 (IL-2) receptor on the surface of cells. These receptors normally respond to an important growth factor and appear to be intimately involved in the uncontrolled growth process of some cancers. Also, a bacterial toxin coupled to a monoclonal antibody is now in clinical trials in patients with widespread ovarian cancer.

- Basic research advances are providing steadily growing insight into the reasons for the ability of cancer cells to develop a resistance to a variety of previously effective drugs. This has always been a major problem in treating cancer effectively. It has been recently found, for example, that cells may protect themselves from cancer drugs through the same method used to resist environmental toxins. In other words, cancer cells made abnormal by exposure to carcinogens may be protecting themselves from other carcinogens, and, in the process, detoxifying drugs used against them. Since many of the effective antitumor drugs have come from natural products, normal tissue exposed to the environment such as lung, kidney, bladder, and colon, and the cancers derived from these tissues, probably also have a strong capacity to resist these natural product-based therapeutic agents. NCI has added drug-resistant human cells to the initial screening for effective anticancer drugs.

- It is felt that initiators and promoters produce cancer in a two-stage process, so the ability to interfere in either of the two phases of cancer development -- initiation or promotion -- offers the possibility of blocking its further progression, rendering it harmless. Initiators, which alter the cell and begin its transformation to cancer, include chemicals, cigarette smoke, viruses and radiation. Promoters, which further facilitate cancer, include such agents as dietary components, hormones, and some compounds found in cigarette smoke.

- A research program on diet and cancer is being supported to elucidate the role of specific foods and dietary components

in an effort to prevent cancer, since some nutritional components, such as fat, are thought to promote cancer, while others, such as fiber, seem to inhibit its development. Studies are currently being conducted to determine the effect of reducing a risk factor in the diet, such as fat, or perhaps adding an antipromoter to the diet, such as a vitamin A derivative.

- The first effective use of human immune cells called LAK cells, used in combination with IL-2, has been carried out in patients with advanced cancers. This process involves the transfer of immune cells directly to the patient, and is called "adoptive immunotherapy". During the past year, this treatment has moved from the laboratory to the clinic, and has been most active in kidney cancer and melanoma.

- Basic research is promising to make adoptive immunotherapy even more effective in the near future. Investigators have already shown that incubating a patient's white blood cells with both IL-2 and a second protein, gamma-interferon, results in a "super" killer cell. New trials are also focusing on the use of lymphocytes isolated directly from tumor specimens. These tumor-infiltrating lymphocytes (TIL) have a greater and a more specific capacity for killing tumor cells in laboratory studies than do cells taken directly from the blood.

CANCER REGISTRY

Question. In 1981, Florida established and implemented a statewide population based cancer registry to determine regional and statewide cancer incidence, to identify cancer "clusters", to conduct surveillance on statewide cancer trends, to improve research data and to provide information for the public. Do other states have similar efforts?

Answer. Thirty-eight states have cancer registration systems which can be utilized for cancer control planning purposes. Six of these states -- Connecticut, Iowa, New Mexico, Utah, Hawaii, and Commonwealth of Puerto Rico have provided incidence, mortality, and survival data to the NCI since the inception of the Surveillance, Epidemiology, and End Results (SEER) program in 1973.

In addition, several other population-based registries, which are not state-wide, contribute: Atlanta, Georgia; Detroit, Michigan; San Francisco-Oakland, California; Seattle-Puget, Washington; and, Newark, New Jersey.

Analyses of the SEER data at NCI included compilation of cases and deaths by form of cancer and calculation of specific and adjusted incidence and mortality rates by geographic area, age, race, sex, and time period, incorporating population estimates provided by the Census Bureau and/or the individual registries. Observed and relative survival rates are prepared by various demographic and tumor characteristics. In addition to the analyses performed at NCI, staffs at each of the registries are involved in surveillance, research, and public information at the local level.

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Although not a part of the SEER program, several other population-based registries also exist, including those in New York, Pennsylvania, Los Angeles, and others. For all registries, the SEER Program offers a source of technical assistance in terms of methodology, training, quality control, data analysis, and cancer control planning.

Question. To what extent do you utilize demographic data in your research efforts?

Answer. Extensive use of demographic data at the county and census tract level has been made by the NCI to more fully understand regional differences in cancer mortality an incidence. Variables of specific interest and utility have been the ethnic mix of populations, proportions of the population employed in certain industries, stability of the workforce as well as factors related to population dynamics. There is an increasing need for demographic data which are reported in a consistent manner over extended time periods.

CANCER INFORMATION NETWORK

Question. You state that "as positive studies in cancer treatment and prevention move forward and results are reported, information on state-of-the-art treatments and prevention is made widely available so it can be used by physicians and the public." I understand how physicians could be aware of and would use the PDQ system, but could you tell me how the network has been expanded through cooperation with state and local government?

Answer. Since 1984, the NCI has undertaken an active program to involve the public health community in cancer prevention and control. The program consists of technical assistance and consultation, grant assistance programs, development of program guidelines with health departments, program tracking and surveillance and public health personnel opportunities. All 50 states and several territories have interacted with NCI staff. Nine awards have been made to eight states for the grant program, Technical Development in Health Agencies, with a first year cost of $1.7 million. PDQ as a major resource for cancer treatment information has been promoted to state and local public health officials who may access the system through the National Library of Medicine or commercial vendors.

Question. How likely would the individual citizen be aware of the system and the means of utilizing it?

Answer. The general public is able to access the information contained in PDQ through their use of the Cancer Information Service (CIS), a toll-free telephone information program of the National Cancer Institute. The CIS consists of 24 regional offices and national office through which any individual may obtain free information on all cancer-related inquiries. PDQ is one of many resources available to CIS staff in order to respond to inquiries. Of those, approximately 10 percent required searching the PDQ database for information. Cancer patients and their families, the general public, and health professionals may reach the CIS by

calling 1-800-4-CANCER. This service is promoted to the public through a wide variety of national media.

PDQ was designed to meet the medical communities' need for highly specialized treatment information on a medical field where standards of care are undergoing continual change due to the rapid evolution and refinement of new therapeutic tools. The primary user group is practicing physicians who need information to care for their cancer patients. However, any health professional with a need for an easily accessible information resource will find PDQ valuable since it is a source of up-to-date, state-of-the-art information on cancer treatment. Students, house staff, subspecialty fellows and nurses can use PDQ as an information resource as well. Patient education summaries, which contain information written in simple, easily understood terminology can be reviewed with patients and their families during the diagnostic evaluation and/or when treatment options are discussed.

The National Cancer Institute, in cooperation with the National Library of Medicine (NLM), provides PDQ as a service on the MEDLARS computer system, a state-of-the-art medical information system operated by the NLM, for the direct use of the medical community in the management and care of patients with cancer. Commercial vendors, BRS/Saunders and Mead Data Central, also distribute the PDQ database on their medical information system, COLLEAGUE and MEDIS, respectively. Opportunity to access PDQ at NLM is extended to the following persons or groups:

- physicians themselves or their designated representatives;
- allied health professionals;
- medical librarians at institutions and organizations providing patient care services;
- medical educators and students of the health professions;
- librarians located in private sector biomedical research and development firms;
- science writers and health care journals; and
- chartered organizations (with medical advisors or advisory boards) providing supportive and rehabilitative assistance directly to cancer patients and their families.

Question. Can you give me some examples of cancer prevention and control programs that are the subject of demonstration grants to state and county public health departments?

Answer. The following eight demonstration projects are supported through the Institutes' Cancer Prevention and Control program.

LOS ANGELES COUNTY, CALIFORNIA

The project begins with a preparation period in which Health Department staff, who will later carry out the new prevention and

control activities, are provided essential orientation by the UCLA School of Public Health and the Jonnson Comprehensive Cancer Center. Phase II provides the same staff with a period of close collaboration with experts in planning for the application of new technology. In the final phase responsibility for program conduct passes completely to the Department. Cervix cancer detection will be a major program focus with additional efforts in mammography and smoking cessation.

CALIFORNIA

The California State Health Department will attempt to reduce cancer risk by improving the State's food supply and educating the public to demand and utilize the appropriate foods. This project will involve participants at every step of the food production and marketing chain.

Using State funds, the Department will mount two county-wide dietary modification pilot projects. The federal grant will also support completion of a state wide cancer control plan which has been in development for several years.

COLORADO

Based on the proposition that smoking cessation programs can be more effective when provided to people who are prohibited from smoking at their workplace and provided through the employer, the Department will aim its initial efforts at state employees. The efficacy of different interventions will be assessed and workplace cessation programs throughout the state will be established. School based prevention programs will be developed that incorporate feedback of impact data to educators on a regular basis. In addition, Colorado will develop and implement a state-wide breast cancer education program for health care professionals and the general public and administer pilot projects for education and screening of medically indigent women.

MINNESOTA

The grant will permit a more extensive evaluation of the Minnesota smoking program than would otherwise be possible. This will promote better decision making on program and resource allocation. This experience will then be incorporated into planning and decision making in other cancer control efforts, including diet and breast cancer detection.

MASSACHUSETTS

Massachusetts will attempt to reduce age adjusted cancer mortality by developing and implementing a model cancer control program. The model program will be focused on reducing the prevalence of lifestyle, environmental, and occupational risk factors. Although well qualified in traditional techniques of public health, Department staff require intensive training in cancer epidemiology, social marketing, behavior change methodologies, and evaluative research. This training will be provided with major teaching centers in Massachusetts.

MAINE

Improvement in surveillance of occupational and environmental related cancers will be attempted through training of hospital personnel in the collection and coding of occupational information on cancer patients. Existing information suggest that cancer mortality in Maine may be higher than SEER experience. The health department will work with NCI grant supported staff to determine whether this excess is accurate and if it is due to patients not receiving state-of-the-art treatment.

CONNECTICUT

Connecticut will attempt to generate increasingly successful interventions for cancer risk reduction through adoption of various strategies such ad labelling of high-fiber/low-fat dietary content in supermarkets, in cancer control programs such as education of students and school staff, including dietician staff, in risk reduction through diet modification. Implementation of such strategies will require training of staff in appreciation of and hands on experience in the use of social marketing techniques.

MISSOURI

While individuals and agencies with expertise relevant to cancer control are working in Missouri, to date there has not been a coordinated effort for cancer control. This project will demonstrate how these individuals and agencies can be brought together to prepare a state cancer plan that will optimize the cancer control effort.

NCI will also support the use of expert consultants and special teaching materials for a two year smoking cessation research and demonstration project within the Missouri Women, Infants, and Children (WIC) and Prenatal Care Programs.

BY-PASS BUDGET

Question. The Cancer Act requires you to submit an annual estimate of the needs of the cancer program directly to the President, without modification by Departmental officials. This By-Pass budget outlined a plan to attain the year 2000 goal of a 50 percent reduction in cancer mortality. How much did you request and can you briefly outline the principle approaches to attain this goal?

Answer. The FY 1988 By-Pass Budget request for the National Cancer Institute is $1.7 billion and includes the following funding highlights: 45 percent of approved research project grants would be funded at recommended levels; five to ten additional cancer centers would be funded at recommended levels; a 50 percent increase over the current level of support would be provided for prevention and control activities; approximately 1,500 trainees would be supported through the National Research Service Award program; $35 million would be made available in construction funds; NCI would have an FTE level of 2,500; an additional $30 million would be provided for increased support for AIDS research; $10 million would be made available to meet the extramural community's needs for scientific

instrumentation; and $50 million would be provided in support of a Special Initiative to begin a coordinated program for mapping and sequencing the human genome.

These resources are associated with the goal of achieving a 50 percent reduction in cancer mortality by the year 2000. The successful attainment of this goal is dependent upon a network of cancer control resources, the framework of which is already in place. Critical components of this network are the cancer centers and the clinical cooperative groups, along with the Community Clinical Oncology and the Cooperative Group Outreach Programs which are associated with the clinical cooperative groups. Furthermore, promoting widespread usage of the PDQ system which provides information to physicians on state-of-the-art cancer treatment and protocol studies will ensure that patients receive the best possible treatment available. In addition, the SEER program which tracks cancer incidence, survival and mortality in the U.S. population provides the ability to monitor progress towards defined objectives as well as to indicate where problem areas continue.

Impressive gains in the areas of basic research, prevention and cancer treatment have already been made which have allowed the NCI to make progress towards the achievement of this goal. Under the By-Pass budget, an orderly expansion of the network of cancer control components would be provided. The 1988 By-Pass Budget projects the resources for 1992. These include: the number of cancer centers should be increased by 50 percent; a tripling of cancer prevention and control activities over the current level would be achieved; and the number of patients being treated under research protocols would double.

PREVENTION

Question. The Institute's prevention program has stressed the need to conduct research on the role of nutrition in the prevention of cancer. Can you describe what nutrition research programs have been initiated and how they are being supported?

Answer. The overall goal of the NCI's cancer prevention research program is to reduce cancer incidence or progression through applied research in the area of chemoprevention and diet and nutrition. The NCI is focusing on the use of specific micronutrients or synthetic chemicals that could be added to dietary intake to lower cancer risk. Chemoprevention agents now under study include vitamin A, beta carotene, vitamin C and E, and selenium. The chemoprevention studies focus on the role of specific foods or food groups in the prevention of cancer. Dietary intervention such as the role of a low-fat diet in the reduction of the incidence of breast cancer, and the role of dietary fiber in colon carcinogenesis are two important areas currently being investigated.

Epidemiological studies have repeatedly shown an association between dietary fat and the occurrence of cancer at several sites, particularly the breast. Numerous experiments on animals also indicate that dietary lipid influences tumorigenesis in the breast. A high-fat diet (about 40 percent of the total calories) is common in practically all developed countries, except in Japan, which exhibits a lower incidence of breast cancer compared to the other

developed countries. Based on strong evidence that lowering the percentage of calories from dietary fat will reduce the breast cancer incidence, the NCI is conducting a clinical trial to test the impact of a low-fat diet intervention in women who are at high risk for breast cancer. The multi-institutional randomized clinical trial of a low-fat diet (20 percent of calories) involves three Clinical Units. This clinical trial has been initiated with proposed participation of approximately 30,000 subjects who are considered to be at increased risk of developing breast cancer. Additional clinics are planned in order to attain the number of subjects required.

Increasing interest in and concern for the relationships between diet, food habits, and cancers, have stimulated a current interest in the nutrient database available to support a variety of research activities. This has become especially evident in epidemiological studies where attempts are being made to characterize dietary differences among various populations exhibiting markedly different incidences of disease which are thought to be associated with diet. NCI is supporting the establishment of an international food composition system to provide reliable, easily obtainable data to support biomedical studies. In addition, data is being collected on total dietary fiber in foods.

Dietary intake of cruciferous vegetables has been indicated to be protective against several cancers, e.g., colon, stomach, lung. This group of vegetables contain, in addition to vitamins (carotenoids and vitamin C), compounds of varying potencies, such as indoles, phenols and sulfur compounds. A thorough review and evaluation is being conducted of the epidemiological and laboratory studies. This will lead to studies of chemopreventive and nutritional effects of ingestions of the compounds by humans.

Although the incidence of gastric cancer has decreased considerably in the U.S. during the past 30 years, it is still a major problem in many parts of the world. The incidence rates in the U.S., although low in white Anglos, are twice as high among Blacks and even higher among Hispanics. Epidemiological evidence shows a strong environmental influence, diet being a major one. NCI plans to develop studies, both epidemiological and dietary, to explore the connection between dietary patterns and gastric cancer as well as possible dietary interventions.

In 1987, the NCI will begin the feasibility stage of a dietary fiber/colon cancer clinical trial in males with colonic polyps. Questions concerning dietary monitoring and intermediate endpoints will be addressed in this stage. This trial will provide more definitive data on the possible protection effect of dietary fiber in reducing colon cancer.

These projects are mostly being funded through the budget line titled: Cancer Prevention and Control utilizing the contract and grant (including SBIR grants) and Cooperative Agreement mechanism.

APPORTIONMENT

Question. Last year there was concern that there were controls imposed on each Institute through the apportionment process. This caused each Institute unnecessary operational problems and required the approval of the NIH Director or possibly OMB before any adjustments could be implemented. We expressed our concern with this process last year. Have the rules changed or are such controls still in existence?

Answer. The rules regarding apportionment of funds are still in effect. However, as requested, during last years hearings, a report outlining the apportionment issue has been sent to the House Subcommittee.

CANCER CENTERS

Question. Dr. DeVita, in past testimony you have described the cancer centers program as one of the "jewels in the crown". That is quite a statement. As we understand it, these organizations are one several linkages with the communities throughout the nation. With all the exciting opportunities and recent accomplishments within the cancer research field, do you predict that this mechanism is in need of expansion regarding the number and location of cancer throughout the nation?

Answer. We currently support 58 cancer centers. Two of these are consortium centers and one is planning grant to a minority consortium. In the FY 1988 By-Pass budget request, we have anticipated an increase of 50 percent in the number of centers will be required by 1992 to facilitate our reaching the goals of the year 2000. This distribution would consider geographic as well as demographic requirements.

The cancer center mechanism coupled with the newly designed instrument, the consortium cancer center support grant, will be the "linchpin" in our overall strategy. They provide a means by which basic scientific discoveries can be applied in a clinical research environment. Through the consortium mechanism, a partnership of health departments and other research can be implemented on a regional basis. The consortium instrument will be particularly helpful in filling gaps in the country where the distances between existing centers is great.

RECOMMENDED LEVELS FOR CENTERS

Question. We are aware that the Cancer Centers program and the Clinical Cooperative Groups are an important part of your strategy to achieve the year 2000 goal in reducing cancer mortality by 50 percent. We have heard considerable discussion that these programs have not been funded at the peer-reviewed recommended levels. How much would be required to fund these programs at the study section recommended levels?

Answer. In the FY 1988 Budget Request, NCI's Clinical Cooperative Groups are estimated to be funded at recommended levels at a reduction of 16 awards from the FY 1987 budget. It would

require $5.5 million to restore the cooperative group program to the FY 1987 level of effort.

The Cancer Centers request would allow the payment of non-competing awards at the levels committed during prior awards while the competing awards would be paid at 90 percent of the current level of funding. In order to pay the FY 1988 competing awards at estimated recommended levels, an additional $10.3 million would be required.

Question. Do you need to restore reductions from prior years?

Answer. Cancer Center grants have been awarded at reductions from recommended levels for the last five years and no funds have become available to perform restorations. Full restoration of all prior year reductions would require over $20 million in FY 1988. In some situations; this is required and practical. In other situations, the program effort may have already been adjusted to accommodate the lower revised amount and, as such, a full restoration may not be required. However, given sufficient funds, payment of the peer-reviewed recommended level is appropriate.

Question. What are your plans for establishing additional cancer centers?

Answer. Within the President's Budget, there are no provisions for additional cancer centers.

CONSTRUCTION/RENOVATION

Question. Once again this year's budget reflects an elimination for funding construction and renovation activities. This current year $5 million was provided. We have heard a lot of discussion in previous years about the condition of facilities available for research and the need to upgrade them including the facilities maintenance at the Frederick Cancer Research Facility. What was the request for construction in the 1988 NCI By-Pass Budget?

Answer. The FY 1988 By-Pass Request for cancer construction activities was $35.2 million. The amount requested represents a part of the over $600 million identified as the projected requirement for construction funding, detailed in a report commissioned by Dr. Hammer, Chairman of the President's Cancer Panel and by the American Cancer Society.

INTERLEUKIN-2 TRIALS

Question. What is the current status of clinical trials of Interleukin-2 (IL-2) with or without Lymphokine Activated Killer (LAK) cells?

Answer. We are continuing our clinical trials of IL-2 and LAK cells both intramurally and extramurally. Our goals in continuing these trials are several-fold. We are looking for clinical settings in which to maximize the efficacy of this treatment, such as treating the patient earlier in this disease as in the adjuvant setting, treating a patient through a different route, i.e.,

intraperitoneal administration of IL-2 and LAK cells for patients with colon cancer and ovarian cancer, and intracerebral administration of IL-2 and LAK cells for patients with gliomas. In addition, we are searching for activity in new tumor types, such as Hodgkin's disease, non-Hodgkin's lymphoma, ovarian carcinoma and in the future breast cancer. In addition to maximizing the effectiveness of IL-2 and LAK cells, we are looking for ways to minimize toxicity, decrease expense, and increase the production of LAK cells through innovative technology. The following is a list of NCI intramural clinical trials which are now active under the direction of Dr. Steven Rosenberg:

1) An adjuvant trial in patients with colon cancer with surgically resectable hepatic metastasis who are randomized between surgery alone and surgery plus IL-2 and LAK.

2) An adjuvant trial in Stage II melanoma where patients are randomized between surgery alone versus surgery plus IL-2 plus LAK versus surgery plus IL-2 alone.

3) An adjuvant trial in Stage II (lymph nodes positive) renal cell carcinoma who are randomized to surgery alone versus surgery plus IL-2 and LAK.

4) A Phase II trial of IL-2 alone versus IL-2 plus LAK in patients with advanced cancer of any histology but particularly non-Hodgkin's lymphoma, renal cell carcinoma, melanoma and selected colorectal carcinomas.

5) Cytoxan plus IL-2 in patients with advanced cancer of any histology but particularly melanoma, non-Hodgkin's lymphoma, renal cell carcinoma and selected colon carcinoma.

6) Interleukin-2 and LAK cells given intracerebrally in patients with resected gliomas.

7) Phase III study in Stage III metastatic melanoma randomizing patients between monoclonal antibodies plus IL-2 versus monoclonal antibodies alone.

In our Biological Response Modifiers Program, the following two protocols are active:

1) Intraperitoneal administration of IL-2 and LAK cells in patients with carcinomatosis from ovarian carcinoma or colon carcinoma.

2) Phase II study of IL-2 plus LAK cells in Hodgkin's disease and non-Hodgkin's lymphoma.

The extramural confirmatory trial carried out by Tufts, Loyola, City of Hope, Albert Einstein, University of Texas, San Antonio, and the University of California, San Francisco has been completed. Nearly 100 patients were treated on this trial which shoved that IL-2 and LAK cell therapy was effective in patients with melanoma, renal cell carcinoma and to a lesser extent colon carcinoma. In addition, this complex technology was

successfully transferred to these six institutions. A second study has now been opened at these six institutions for patients with renal cell carcinoma, melanoma and favorable histology non-Hodgkin's lymphoma. In this trial, modifications were made from the original regimen in an attempt to increase the efficacy of IL-2/LAK. Thus far, 32 patients have been entered into this study.

A Request for Proposals (RFP) was issued late in the summer of 1986 for continued contract-supported extramural research in the area of IL-2 and LAK. Six to eight institutions will be chosen and will begin a next phase of study by early summer in which different tumor types will be tested for activity. A modified regimen to increase efficacy and reduce toxicity will be implemented and innovative ways of generating LAK cells in a laboratory will be sought.

Dr. Steven Rosenberg of the NCI and Dr. Richard Kradin of Massachusetts General Hospital are carrying out trials using tumor infiltrating lymphocytes which appear to be 10 to 20 times more active than LAK cells. The technology for the generation of these cells is very complex and is being perfected by both of these groups. This is an attempt to decrease the toxicity of this treatment as it requires less IL-2 to demonstrate a response. These clinical trials have just begun and progress in this area will be watched closely.

Regarding clinical trials using IL-2 alone, we are testing two types of schedules:

1) High dose IL-2, short duration: These studies are based on the preclinical data that indicate that the maximum tolerated dose of IL-2 will result in the optimal antitumor response. The trials are similar in design to the IL-2/LAK trials except LAK cells are not given. Currently patients with renal cell carcinoma, malignant melanoma and colorectal carcinoma are being studied. Because the highest possible dose of IL-2 is given, the treatment regimen cannot be given on a chronic basis and usually requires support in an Intensive Care Unit.

2) Lower dose IL-2, chronic administration: These trials are designed to determine if long-term administration IL-2 results in antitumor responses, especially in malignancies which appear to be responsive to IL-2/LAK. To permit chronic administration, lower doses of IL-2 are required. Initial data suggests that LAK cells may be generated in the patient after prolonged treatment with IL-2 alone, and some antitumor responses have occurred. It is too early to compare these schedules with other regimens using IL-2 (with or without LAK cells).

Question. In your General Statement you discuss a connection between cancer development, oncogenes, metastasis, and drug resistance. How does this knowledge provide us with new possibilities of preventing cancer?

Answer. It is apparent that the development of cancer is a stepwise process, and prevention may be possible by interfering with

any of the steps in the process. Advances in oncogene research are enabling scientists to begin to define the different steps involved in and the specific kinds of genetic changes which must occur at each step of carcinogenesis. Once we understand the mechanisms by which oncogenes become altered in cancer cells and are able to correlate various carcinogenic agents (radiation, chemicals, etc.) with specific mechanisms and types of cancers, strategies based on the genetics and biochemistry of cancer can be developed to prevent these changes from occurring to individuals exposed to such agents in their daily lives. By the same token, individuals exposed to different carcinogenic process have occurred which place them at a higher risk to experiencing the additional steps required before neoplasms actually appear.

A new area of research is beginning to define another class of genes which contribute to tumor progression by enabling a tumor cell to acquire the properties of invasion and metastasis. Experimental analysis has shown that specific cancer cell proteins are required for each step of the invasive process. The cancer cell first must attach to the tissue barrier using specific cell surface binding proteins, or receptors. One such receptor is the laminin receptor which enables a tumor cell to bind to laminin, a major protein found in the basement membrane. The gene for the laminin receptor has been cloned and its binding domain determined. This has enabled scientists to develop antilaminin "blocking agents" which can prevent the attachment of the tumor cell, and thus potentially could inhibit tumor cell invasion. A second step in the invasive process involves breaking down the tissue barrier. The tumor cell secretes special enzymes (type IV collagenase) to facilitate this process. Blocking the action of these enzymes is another approach to preventing metastases. Finally, a tumor cell must migrate forward and penetrate the tissue barrier. Recently a motility stimulating factor termed "autocrine motility factor" (AMF) has been identified which is elaborated by a variety of different types of human and murine tumor cells. Development of agents to block the action of AMF would be another approach to preventing metastases.

Tumor cell invasion and metastasis are the primary cause of cancer death. Pharmacologic approaches to blocking all three of these steps are being developed and tested in vitro and in animal models. If applied to patients, these agents could potentially prevent an early stage tumor from reaching the stage of invasion and metastasis, and thus be used as cancer prevention agents.

Another major cause of cancer treatment failure is the development of resistance to multiple drugs in tumors initially responsive to treatment, or the inherent resistance of a tumor to chemotherapeutic agents. Recent studies suggest a common molecular mechanism of multiple drug resistance. It appears that drug resistance mechanisms may exist in some normal tissues as a method for clearing the cell of toxic substances, and possibly, carcinogens. This genetic mechanism may be amplified and expressed in resistant tumors or "turned-on" in tumors which become drug resistant. While the ability to block the action of this genetic mechanism may lead to new treatment approaches in overcoming drug resistance, the development of methods to enhance its activity in

normal cells could conceivably become an important approach to cancer prevention.

Question. Where are we now in the use of monoclonal antibodies against cancer? What successes have we had?

Answer. Monoclonal antibodies have become a very important tool in cancer diagnosis, treatment, and in cancer biology studies because of their affinity for highly specific target molecules. Using chemical conjugation techniques, an antibody can be coupled to a radioactive isotope. If the target molecule is on the surface of a tumor cell, the radioactivity of the isotope can be used to locate tumors and then to destroy them. Monoclonal antibodies can also be linked to toxins, antitumor drugs, or immunological stimulants; much current research and development effort is directed at the detailed chemistry of antibody conjugation. Some of the highlights in cancer research involving monoclonal antibodies in NCI-sponsored research follow.

As new monoclonal antibodies are developed, laboratory and animal testing is used to select those which, among other criteria, are most reactive to a specific target. One of the first clinical tests of a new monoclonal antibody employs an antibody-radioisotope conjugate in order to evaluate its ability to localize specifically to tumors. The unconjugated antibody is also tested in progressively higher doses to determine toxicity and immunological effects and possible direct antitumor effects. Clinical trials with other related agents, such as antibody-toxin and antibody-chemotherapy conjugates may then be considered. Several NCI-sponsored studies of monoclonals have demonstrated some significant antitumor responses in colon and pancreatic cancer, malignant melanoma, cutaneous T-cell lymphomas, and B-cell lymphomas. These studies have provided a number of promising leads to follow and have sparked development of other monoclonals.

For example, the studies by Dr. Thomas Waldmann and his co-workers in our intramural program provide an example of the insights that have been obtained when a monoclonal antibody is utilized to study a form of human leukemia. These scientists prepared a monoclonal antibody, anti-Tac, which was directed toward the leukemic cells from a patient with adult T-cell (thymus derived lymphocytes) leukemia, the form of leukemia associated with the human retrovirus, human T-cell leukemia/lymphoma virus (HTLV-I). This anti-Tac monoclonal antibody was shown to react with a critically important receptor on T cells which controls the proliferation of these cells. The proliferation of activated T cells requires interaction of the regulatory protein, Interleukin-2 (IL-2), with its specific cell surface receptor. Anti-Tac was shown to bind to the IL-2 receptor blocking the interaction of the growth factor with this receptor. Normal resting cells, including T cells, do not manifest the receptor for IL-2 whereas the malignant leukemic T cells associated with HTLV-I express this growth receptor and are Tac antigen positive. A soluble form of the Tac peptide has been identified in the plasma and urine; the level of which parallels the number of Tac positive cells in the tissues. Consequently, the anti-Tac monoclonal antibody has now been successfully used to aid in the diagnosis and

in the monitoring of treatment response in adult T-cell leukemia cases.

Regarding treatment uses for anti-Tac, the observation that this monoclonal antibody specifically identifies the leukemic T cell in adult T-cell leukemia but not normal T cells, as well as the fact that it blocks the interaction of T-cell growth factor with its receptor on the malignant cells, has provided the scientific basis for studies evaluating the efficacy of this monoclonal in the treatment of patients with adult T-cell leukemia. This antibody has been administered to seven patients with the adult T-cell leukemia and in one case was associated with an over 90 percent reduction in the number of malignant T cells; the reduction was maintained for six months. Also, two powerful toxins have been linked to the anti-Tac and have been effective in killing adult T-cell leukemia cells. Actual therapy of patients with the adult T-cell leukemia with toxin conjugated anti-Tac has been initiated. Finally, successful laboratory studies have been completed involving radioactive coupled anti-Tac. These anti-Tac conjugates killed cultured Tac positive adult T-cell leukemia cells at levels of radioactivity that had only a modest effect on other T-cells.

Many current studies are focussed on solving some of the initial problems with monoclonals in order to set the stage for a major impact on cancer therapy. Most of the current antibodies being studied now are generated from antibody-secreting mouse cells. The human immune system rapidly reacts against such foreign substances and most of the mouse monoclonal molecules are consumed by scavenger "RE" cells rather than going to their intended tumor targets. One method to avoid this problem is the injection of the monoclonal antibodies directly into lymphatic channels, rather than the bloodstream. Using this technique, remarkably sensitive imaging results were obtained which allowed detection of small amounts of tumor in lymph nodes in the back of the abdomen. These results suggest that therapeutic effect may be enhanced by this route as well.

There are other approaches to avoiding the RE cells' scavenging of monoclonals. Instead of using a complete mouse antibody, it is possible to employ part of the antibody which has the portion which binds to the target, but lacks most of the portion of the antibody molecule which may be recognized by the RE cells. A variation of this idea uses genetic engineering to make a "chimeric" antibody, which combines the binding portion of a mouse antibody with the remainder from a human antibody. For example, a chimeric version of a monoclonal antibody which has shown promise in gastrointestinal cancer, has been synthesized and is being introduced into clinical trials. A number of other experimental approaches are also being tested to reduce the undesired interference of the RE system with mouse antibodies.

A few monoclonal human antibodies have been made and are in clinical trials. These human antibodies should avoid many of the problems with the more easily produced mouse antibodies. Clinical trials with human anticolon antibodies at the NCI have demonstrated tumor imaging properties, and NCI-sponsored trials at UCLA with a human antibody against melanoma have produced shrinkage of malignant skin nodules which have been directly injected by the antibody. In

current trials these antibodies are now being given in larger doses intravenously and are expected to generate important information about the effects of human monoclonals.

NCI-sponsored research is exploring the use of monoclonal antibodies to purge bone marrow cells of tumor cells, which, if successful, may open the way to wider use of bone marrow transplants against cancer. In intramural NCI lymphoma research, anti-B1 (against B cell tumors) and anti-T12 (for T cell tumors) are being used to purge bone marrow cells in patients with aggressive. Anti-B1, conjugated with a highly potent toxin, is being studied at the University of Minnesota in B cell acute lymphoblastic leukemia patients. Other NCI trials with toxin-conjugated anti-ovarian cancer antibodies will begin soon.

In addition to approaches using conjugation technology, there are a number of trials planned with unmodified monoclonal antibodies. The NCI supports investigations into the use of monoclonal antibodies directed against growth factor receptors which may be important in certain tumors. Efforts are also underway to develop monoclonal antibodies against the tumor cell surface molecules associated with certain types of drug resistance to cancer chemotherapy. Other trials will explore the combination of antibodies with other immune system stimulants, such as IL-2 and interferons.

Finally, monoclonal antibodies against "normal" cells may have important antitumor effects in certain cases. It has been observed in animal experiments that suppressor T cells may interfere with effective antitumor immunity. The antibody anti-Leu2a has been given to cancer patients, producing an observed decrease in suppressor cells in the peripheral blood. It is too soon to evaluate the immediate antitumor effects of this approach, but we expect the detailed results to be used as the foundation for future anticancer therapies which will combine many arms of the immune system in an integrated approach.

Question. We keep hearing more and more about the role of viruses in causing cancer. What about this?

Answer. The past decade has seen a remarkable evolution in research on biological carcinogenesis. Work during the first half of this century, suggesting the viral etiology of certain animal cancers, was confirmed by later investigators who isolated tumor viruses from a wide variety of animals including rodents, birds, cats, amphibians, and primates. It was logical, therefore, that scientists should focus on the search for viruses that might be involved in human cancer in the same way as the viruses responsible for cancer in lower animals.

The advent of powerful and highly sophisticated techniques for detection and analysis of specific nucleic acid sequences and proteins have shown that the role of viruses in cancer is more complex than was previously thought. Triggered by chemical carcinogens, radiation, hormones, the aging process, immunosuppression, and other influences, selected viral sequences may direct the synthesis of the proteins responsible for cellular transformation. These are the sequences which are acquired by

viruses through recombination and reintroduced into new hosts resulting in the rapid induction of cancers. Tumor viruses thus directly participate in the molecular pathways by which a normal cell is transformed into a malignant one.

The continued search for human cancer viruses provided the first demonstration of the involvement of a retrovirus from a human malignancy. A human cancer virus, HTLV-I, was isolated from a patient with cutaneous T-cell lymphoma. The nucleic acid sequence, the viral reverse transcriptase enzyme, and the major internal structural protein of HTLV-I are not significantly related to any of the known animal retroviruses. A second closely-related virus, HTLV-II, was isolated from the peripheral blood T-cells of a patient with cutaneous T-cell leukemia. There are now numerous isolates of HTLV obtained from patients from different parts of the world. Studies concerning the biological and biochemical characterization of the different isolates are continuing.

The Epstein-Barr virus (EBV) has been associated with three types of human cancer: Burkitt's lymphoma, nasopharyngeal carcinoma, and lymphomas in immunodeficient individuals. Three proteins that may be important for the development of an EBV vaccine have recently been produced. All three proteins are immunogenic. Availability of these antigens increases the prospects for the development of a vaccine for this virus which has been associated with a variety of human malignancies.

Human papillomaviruses (HPVs) have also recently emerged as another probable cancer promoting virus in man. Investigators have shown that HPV DNA can be detected in 80 percent of the subjects with cancers of the anogenital tract, e.g., cervical cancer. Metastases from cervical carcinomas have also been found to contain HPV DNA of the same virus type as found in primary cervical tumors. Viral encoded proteins have also been detected in both primary human tumor cells and established cervical cancer cell lines. These last results are strongly suggestive that HPV information is important for a cancer-like phenotype in tumors.

A variety of epidemiological, immunological, and pathological evidence continues to implicate the hepatitis B virus (HBV) as a necessary, though not sufficient, etiological agent for primary hepatocellular carcinoma in humans. Chronic carriage of this virus is associated with a greatly increased risk of the development of liver cancer. Future studies will continue to examine the mechanisms of HBV associated neoplasia.

AIDS

Question. Dr. Fauci, 30 percent of the Federal AIDS budget is in your Institute and 60 percent of the NIH AIDS work is in you Institute, and I believe you are the NIH AIDS coordinator. Florida is third in the nation in AIDS cases, and with the alarming growth rate in sexually transmitted diseases in Florida we are at some risk. Dr. Fauci, give us an update on your AIDS work. When will we better understand the mechanism that breaks down the immune system, when will we have a cure and a vaccine, and in your judgment to what extent is the general population at risk?

Answer. The responsibilities and role of the National Institute of Allergy and Infectious Diseases (NIAID) with regard to the acquired immunodeficiency syndrome (AIDS) began when the first cases of this puzzling disease were identified in 1981. Since that time the NIAID has aggressively pursued research, both intramurally and extramurally, to identify the cause of this disease and to develop methods to treat or prevent it. The discovery that AIDS is an infectious disease of the immune system defines clearly that research in this area is the responsibility of the NIAID.

The NIAID has focused its research efforts in five main areas of investigation: the study of the epidemiology of this infection, clinical and basic research aimed at identifying treatments, research on the pathogenesis, research on vaccine development, and basic research on the virus responsible for this infection. Significant scientific progress has been made in these five areas. In addition, an extramural organizational program has been established within the NIAID to manage these research efforts.

Epidemiology - The NIAID is conducting research on the epidemiology of this infection within the United States and overseas. The prospective epidemiologic study of homosexual men in five locations in the United States was begun before the causative agent, human immunodeficiency virus or HIV, was identified. These five studies continue and have provided important new information on the route of transmission of this virus and on the natural history of infection. Currently, all five centers are actively characterizing the natural history of the central nervous system complications of HIV infection in these five prospective cohorts. In addition, the NIAID began epidemiologic efforts in Kinshasa, Zaire to better understand the natural history and distribution of this infection in an endemic area. These efforts have complemented research activities conducted within the intramural laboratories of the NIAID by providing valuable specimens for analysis. Within the extramural program, initiatives to study HIV infections in the Caribbean region and Latin America are currently under negotiation. In addition, the extramural program plans to initiate research efforts to study heterosexual transmission and perinatal infections.

Treatment - During the last year research on therapies has been emphasized by the NIAID. The most important accomplishment has been the establishment of nineteen clinical research units to study the efficacy of antiviral drugs for this infection. These units were launched in July, 1986, and have already initiated the largest clinical trials of antiviral drugs ever attempted. These units continue to expand their portfolio of clinical trials with many antiviral drugs, including azidothymidine, ribavirin, interferon and dideoxycytidine. Clinical trials to identify therapies for Kaposi's sarcoma and other complications of HIV infection are also underway within the intramural and extramural components of NIAID. This clinical research is complemented by the establishment of a basic research component to supply future antiretroviral drugs to improve the therapy of this infection. The National Cooperative Drug Discovery Group Program for AIDS was established in late 1986 and will be expanded during this year. A facility to screen candidate antiretroviral drugs in tissue culture and four animal models were also established during 1986. A committee structure to advise the NIAID and NCI in the further development of candidate antiretroviral drugs was also established.

Pathogenesis - Research on pathogenesis has been actively supported at all levels by the NIAID. The role of the central nervous system as a sanctuary for the virus and the mechanism by which this important organ becomes affected were actively pursued by intramural investigators. The NIAID has sought to stimulate this research through the solicitation of investigator-initiated research projects. Two research contracts to characterize the pathogenesis of the infection of macques by the related lentivirus, simian T-lymphotrophic virus (STLV-III), were awarded in September, 1986.

Vaccine Development - Vaccine development efforts within the NIAID were intensified during the last year. Intramural investigators are characterizing the antigenic variation of HIV isolates and defining the nature of the immune response to infection. Extramural research efforts have focused on the development of methods to quantitate the virus, measure immune responses that are protective in the host, develop necessary reagents to study the feasibility of vaccine approaches and develop animal model systems that might serve as alternatives to the chimpanzee. Plans to conduct phase I/II clinical trials of candidate HIV vaccines have been made in the existing vaccine evaluation units supported by the NIAID.

Basic Research - Basic research on HIV and related retroviruses has been emphasized during the last year. Effective vaccines and antiviral drugs can only be developed with adequate knowledge about the causative agent. In this regard the intramural laboratories of the NIAID have sought to understand the mechanism of replication of the virus, to characterize the antigenic diversity of HIV and to relate these changes to pathogenic processes in the host. A HIV genetic sequence analysis unit was established to accelerate the acquisition of genetic information into a computer-based data system and to analyze and compare genetic sequences from diverse isolates. Research on the basic properties of the envelope glycoproteins, internal viral proteins and particularly on the reverse transcriptase enzyme of the virus has been stressed by the NIAID. Critical information on the relationship of molecular structure to biological function is an essential priority of the NIAID.

The mechanism of injury to the immune system is a subject of intense research both within the intramural research laboratories of the NIAID and through research efforts support by the NIAID in the extramural community. We now know that the injury to the immune system is mediated by a variety of mechanisms. These can be categorized into two general types. The first general type is through the destruction of the cells of the immune system by direct action of the virus. When the virus infects the cell, it takes over the cellular machinery to produce more copies of itself or it may remain dormant within the cell to be activated sometime later in life. The viral replication process will destroy the cell. The second form of injury is mediated probably by the response of the host to this infection. As cells in the immune system become infected, the host will try to repel the invasion by directing an immune response at these infected cells. In essence the body begins to destroy itself. This process will also injure the immune system. Other, more subtle mechanisms of injury may significantly abet this process. For example, the immune cell may alter or affect the way that cell functions within the immune system. The cell may be unable to recognize or respond properly to other antigens. Although

we understand some of the pathogenic processes that are involved in the injury to the immune system, we are still far away from being able to control these effects and to restore immune function to the injured host. This is a challenge for the future. Additional basic research must be done to better understand these processes so that we may be able to treat and restore immune function in these patients.

Bringing a vaccine into widespread use in the general population is a time consuming process even under the best of circumstances because in addition to assuring the efficacy of the vaccine, it is imperative that the product be safe when administered to humans. Let me briefly describe for you that process.

When a candidate preparation has been shown to induce the appropriate immunologic responses in a variety of laboratory animals, studies are then performed in an appropriate challenge model system. This challenge system is done in an animal model species that reacts similarly to humans when exposed to the infectious agent in question; in the case of HIV this animal is the chimpanzee. Chimpanzees would be vaccinated with the candidate vaccine and then later challenged with the HIV to ascertain that the vaccine did in fact protect the chimpanzee against exposure. After this stage the work is then ready to proceed to clinical trials in humans.

These first tests in humans are called Phase I and test the safety and antigenicity of a candidate vaccine in a small number of volunteers. As you know, the NIAID has had a long history of involvement in vaccine research and development for a large array of infectious diseases. To accommodate testing of those vaccines we have a number of Vaccine Evaluation Units in which we can conduct Phase I tests. We will be able to provide the testing capacity to anyone who needs it in the very near future; and in this regard, we can serve as a national resource for Phase I vaccine tests.

By a further expansion of this effort we will subsequently be able to provide for Phase II tests. Such tests are conducted on those vaccines that have passed Phase I testing and are designed to evaluate safety and antigenicity in a larger number of volunteers and to also begin to determine the appropriate dose and schedule for administering the vaccine to induce an immunity.

Before widespread use, the FDA would require that a full-scale efficacy trial had shown the vaccine to be successful in preventing disease in humans in natural circumstances (Phase III trial). Although such trials are always difficult and complex, they may be especially difficult with AIDS. However, we have started at an early date to address the design of such trials. The PHS and others supported a meeting in Washington on March 25-27 to begin the scientific consideration of how to proceed to test the efficacy of an AIDS vaccine. The outcome of that meeting will provide us with the information necessary to design a trial and to identify the population that would be required.

This careful process has permitted the U.S. to market safe and effective vaccines for a variety of infectious diseases. Once a vaccine for AIDS has successfully produced a proper immunity in chimpanzees, we predict that it will take three to five years to

complete the Phase I, II and III tests. Thus, we are not anticipating a vaccine for widespread use before well into the 1990s.

Because the retrovirus responsible for AIDS has the capacity to integrate into the host cells that it infects, it is unlikely that any drug will ever be able to eradicate all vestiges of the virus from the body. The most benefit that can be anticipated from antiviral treatment would presumably be the chronic suppression of virus replication and prevention of the infection of new cells by drug treatment. An effective model exists in the field of antiviral chemotherapy with acyclovir prophylaxis of herpesvirus infection through chronic suppressive therapy. So if the definition of a "cure" is interpreted to be eradication of all virus, drug treatment is not likely to be successful. If cure can be defined in terms of control of active virus replication, the possibility exists that agents will be identified that will achieve this end. An unknown factor at this point is how toxic the drugs will be when administered for long periods of time.

The NIAID recognizes that rather than "high risk groups" for exposure to HIV there are "high risk behaviors." This concept implies that intimate contact with any individual engaging in "high risk behavior" increases the risk for infection. Thus, the general population can be at risk if one member of a partnership has sexual relations outside the relationship. Sexual relations with prostitutes (male or female) has been highlighted as a significant behavioral risk. However, multiple sexual partners, independent of remuneration, place the "monogamous" partners at risk as well as the "active" partners.

Pediatric AIDS will continue to increase as long as infected women bear children. The rate of spread in the heterosexual community is just beginning to be explored. Male to female and female to male transmission has been documented. The rate of spread becomes a function of the amount of sexual activity in a given community and the degree of sexual interactions between bisexual men, intravenous drug users, and those individuals who are perceived to be the "general population."

At the present time, based on surveys of volunteers for military service, approximately one percent of young men (and women) are rejected because they have demonstrated the presence of antibodies to HIV. Even routine screening of voluntary blood donors demonstrates that approximately 0.5 percent of the population (excluding individuals who self-defer because they engaged in high risk behaviors) are currently infected with HIV.

DRUGS TO TREAT AIDS

Question. Dr. Fauci, would you please bring us up to date on what drugs are available for the treatment of persons with AIDS? What efforts are underway to develop additional drugs or better drugs? Are you working on other types of therapies and what promise do they hold for treatment?

Answer. The first large, multicenter protocols that were activated are evaluating azidothymidine, since this is the only agent to date that has demonstrated any significant benefit in

treating HIV infection. Additional information must be learned concerning the safety and efficacy of this agent, both alone and in combination with other drugs. Some of the combination studies planned include trials of AZT with ganciclovir, desciclovir, interferon, IL-2, and acyclovir. Other drugs that potentially may be effective in treating HIV infection include foscarnet (phosphonoformate), dideoxycytidine and ribavirin. We are also planning studies that will address both treatment and prophylaxis of the opportunistic infections and neoplasms associated with AIDS. The AIDS Clinical Drug Development Committee meets each month and is reviewing material on a number of new agents, including agents that are claimed to stimulate the immune system. Ultimately, these agents may prove useful in combination with effective antiviral drugs.

There are three components of the NIH that are intimately involved in AIDS drug development: the National Institute of Allergy and Infectious Diseases, the National Cancer Institute, and the Office of the Director, NIH.

The NIAID has established short and long term plans for drug development. NIAID established a screening program for HIV to test for the serendipitous discovery of new compounds for AIDS. This program was established with the United States Army Medical Research and Development Command to fulfill an immediate need. Out of this program four compounds have been identified with sufficient activity against HIV to warrant further development. The pharmaceutical industry is anxious to develop drugs identified as having the potential to inhibit HIV. Interactions between industry and NIAID have been positive, and two compounds identified in the screening program are being developed by industry. NIAID has interacted with the supplier to the screening program and the staff of NCI for the entry of two of the compounds into its preclinical development program for toxicology, pharmacology and scale up synthesis of the drug.

At the preclinical level the emphasis is placed on developing drugs for AIDS as rapidly as possible. To do this we have encouraged pharmaceutical companies to participate in the National Cooperative Drug Discovery Group Program for the Treatment of AIDS. A meeting was held on January 28, 1987, with representatives from the pharmaceutical industry and the funded Drug Discovery Groups to increase the level of interaction and to address the concerns raised by the private sector. Smith Kline and French and Bristol Myers are interacting with groups funded last year. Many other companies are attempting to participate in the program this year. The NIAID has also solicited applications for animal models to test for the efficacy of identified compounds for the treatment of AIDS, to target drugs to infected cells, to target compounds to the central nervous system, and to analyze biological response modifiers in combination with antiviral drugs.

These are exciting times in the field of antiviral drug development. Already through the efforts of NIH and industry it has been shown that a therapeutic approach is possible. The results of AZT are encouraging for a first generation drug. We are hopeful that other more effective and less toxic compounds will be identified in the future. Some compounds of immediate interest are dideoxycytidine (ddC), dideoxyadenosine (ddA), dideoxyinosine (ddI),

certain synthetic peptides, synthetic "anti-sense" oligonucleotides and other drugs in stages of preclinical development. Other compounds, such as ribavirin are also promising. Still others, such as alpha interferon, foscarnet, AL721, Imuthiol, and Isoprinosine, need to be evaluated in clinical trials before we know what their possible benefit might be.

AIDS FUNDING

Question. The National Academy of Sciences called for $1 billion for AIDS research and $1 billion for AIDS treatment and education by 1990. Is your AIDS budget request adequate for 1988?

Answer. At this time the budget request is adequate to fund what we foresee needs to be done. Because of the very special nature of the AIDS effort--because it changes so rapidly--we are constantly reassessing our needs, and with that reassessment we will be able to answer this question more accurately.

SPINOFF FROM AIDS WORK

Question. The immune system is more and more regarded as an organ and we know that when it is both over and under active it creates disease. Explain for the Committee the potential benefit through AIDS research of better understanding the immune system as it relates to the cure of other diseases.

Answer. Research on AIDS has taken many forms and directions since the infection was first identified. These research efforts will have many applications to other areas of investigation. For example, research on the effects of the human immunodeficiency virus (HIV) on immune cells will reveal new insights into the regulatory processes that operate in the immune system. This information, in turn, will permit the development of therapies and possibly cures for a variety of other diseases of the immune system, such as systemic lupus erythematosus. In addition, clinical research efforts to reconstitute the immune system of AIDS patients should help in the development of clinical approaches to moderate, reconstitute or regulate the immune system after organ transplantation or to reconstitute the immune system in patients with genetic immunodeficiency disorders.

This is only part of the answer because the large commitment to the development of antiviral drugs that will be required to provide effective therapies for this infection will also generate drugs that will be of use in other infectious diseases and possibly some malignancies.

PERTUSSIS VACCINE

Question. I have been concerned about the crisis regarding the side effects of pertussis vaccine--and the resulting high costs caused by decline in vaccine manufacturers and increased liability. County health departments are now faced with paying $11-$12 for a vaccine that used to cost less the $1.00/dose. What progress have your research efforts made in developing an effective, safe, and non-toxic vaccine?

Answer. Several American and foreign manufacturers are now

developing, or have successfully developed, new acellular pertussis vaccines for eventual marketing within the United States. These manufacturers include: Lederle, Connaught (Canada), Merieux (France), Biken (Japan), Takeda (Japan), Chemo-sera Therapeutic (Japan), Michigan Department of Public Health, Sclavo (Italy), Wellcome Laboratories (Great Britain), Massachusetts State Health Laboratories, and the National Institute of Child Health and Human Development. The vaccines basically contain either inactivated pertussis toxin alone or inactivated pertussis toxin combined with filamentous hemagglutinin protein. A few of the products also contain small amounts of a third protein called agglutinogens. An efficacy trial, partially supported by NIAID, is proceeding in Sweden. In the United States, two new candidate vaccines have already received IND's from the FDA, two are pending, and two more are expected to submit IND requests within the next 6-8 months. All four of NIAID's vaccine evaluation units are prepared to test these products, and several have already prepared protocols to evaluate the vaccines for safety and immunogenicity as soon as they become available. Research on the development of a recombinant DNA pertussis vaccine has progressed significantly during the past year at NIAID's Rocky Mountain Laboratories. Several recombinant proteins have been isolated and purified and shown to be immunologically active. Rapid advances in this latter area are expected in the near future.

AIDS TREATMENT EVALUATION UNITS

Question. Your statement includes mention of 19 AIDS Treatment Evaluation Units in institutions throughout the country. Do you have such a research unit in Florida? (If not, why not, since Florida is third among the states in number of cases.) What promising treatment therapies have you identified in this research effort?

Answer. There is an AIDS Treatment Evaluation Unit in Florida, at the University of Miami. The principal investigator is Margaret Fischl, M.D. This unit is particularly active in developing protocols for multicenter studies and Dr. Fischl has actively participated in developing many of the protocols now underway or planned for implementation shortly. Since there are many pediatric AIDS patients in the Miami area, this unit is also the focus of the pediatric studies and Dr. Gwen Scott from the Miami ATEU is Chairman of the Pediatric Subcommittee for all the ATEU's.

Dr. Fischl is the lead investigator on an ongoing study which is examining two doses of azidothymidine to determine if a lower dose will result in less toxicity and equivalent efficacy to the dose used in the first controlled trial. She has also developed a protocol to evaluate the treatment of Kaposi's sarcoma with a drug called doxorubicin, an antitumor agent which may prove more effective than existing agents to treat these lesions. In addition, the Miami group will conduct a Phase I trial of the combination of AZT and interferon in patients with Kaposi's sarcoma.

CHRONIC HEPATITIS B INFECTIONS

Question. Dr. Fauci, we have heard about new vaccines for the prevention of hepatitis B disease. I understand, however, that many people infected with this virus become chronic carriers and may

develop active forms of the disease or liver cancer later in life. What is your Institute doing that would give hope to people with chronic hepatitis B infections?

Answer. Yes, there are over 800,000 carriers of hepatitis B virus (HBV) in the United States alone. They remain a reservoir for infection of healthy individuals. In the last year the ability of scientists to develop new antiviral drugs for treatment of these chronic carriers truly has blossomed. Basic research scientists have developed new in vitro systems in which to test candidate drugs against hepatitis B. Several suitable antiviral targets in the viral replication cycle have been identified. NIAID contract scientists have demonstrated that the woodchuck is a valuable animal model for in vivo testing because infection of the woodchuck with the woodchuck hepatitis virus causes disease very similar to that caused in humans by hepatitis B virus. We have also found similarities in the replication of HBV and human immunodeficiency virus (HIV) which causes AIDS. So we have a lot of leads that are being actively pursued.

AIDS INTERNATIONAL RESEARCH COLLABORATION

Question. Dr. Fauci, we are well aware that AIDS is a severe international problem as well as a major concern to the United States. Does your Institute sponsor any research either directly or through collaborative efforts which addresses the problem in other countries?

Answer. The NIAID is deeply committed to better understanding the spread of HIV infection and its resultant diseases in nations throughout the world. At the present time we are funding, in collaboration with the Centers for Disease Control (CDC), an extensive laboratory and research complex in Kinshasa, Zaire. During the past decade we have actively collaborated with European and African investigators in the United States and overseas to better understand the spread, clinical course, and appropriate clinical interventions for a number of tropical diseases. We have recently issued an announcement soliciting International Collaborative AIDS Research grants; this will provide an opportunity for United States universities to collaborate with foreign nations in studying HIV-related problems. This grant mechanism will provide five year funding for such collaborations. Dr. John LaMontagne, Director, AIDS Program, NIAID, has represented the Institute at several international meetings designed to critically examine the nature and extent of HIV infection in Africa and to plan for research studies, including chemotherapeutic and vaccine interventions.

NIAID will soon sign a multi-year contract with the Pan American Health Organization (PAHO) to better understand the natural history and clinical course of individuals who are infected with HIV residing in other portions of North American, Central America, the Caribbean, and South America.

FISH OIL SUPPLEMENTS

Question. Dr. Fauci, we read newspaper articles and even advertisements for fish oil supplements that are supposed to prevent a number of diseases. There also seems to be a role for these

supplements in the prevention or treatment of diseases such as asthma. Would you please discuss this for us and tell us about any work your Institute is doing in this area?

Answer. Studies under NIAID support have shown that, when normal people are fed a supplementary diet containing fish oil (which contains eicosapentanoic acid and docosahexanoic acid) in sufficient quantities and for a long enough period of time (six weeks as a minimum), the cellular inflammatory responses are blunted. In diseases such as rheumatoid arthritis, where joint inflammation plays an important role, it is hypothesized that such dietary supplements can ameliorate the disease. If so, they might be considered an appropriate adjunctive form of treatment in other immune system mediated diseases such as asthma where associated inflammatory responses play important pathogenetic roles. Currently an NIAID Asthma and Allergic Disease Center is evaluating fish oil dietary supplement in a group of patients with asthma. Preliminary results indicate that a decrease in the inflammatory response of certain cell types had been identified in these patients. Although cellular changes can be measured in this short time, for tests of clinical improvement, long-term clinical trials of asthmatics treated with fish oil dietary supplements will be required.

MONOCLONAL ANTIBODIES

Question. Dr. Fauci, we hear a lot about the potential of human monoclonal (pure, highly specific) antibodies and that more efficient methods are now available for their production. Please tell us about some of the clinical applications of these monoclonal antibodies?

Answer. Monoclonal antibodies may be used clinically for the diagnosis, treatment and management of human diseases. In diagnosis, they could be used to localize tumors, sites of infection and lesions. This can be achieved by attaching small amounts of radioisotopes to the monoclonal antibodies which can subsequently be detected by sophisticated radio-imaging equipment when the antibodies arrive at target sites. In addition to determining the location and size of tumors, this procedure could be used, for example, to determine the amount of cardiac tissue damage in myocardial infarctions.

In treatment, "immunotoxins" can be delivered to diseased and offensive target cells. Immunotoxins are molecular conjugates prepared by coupling monoclonal antibodies to other toxic molecules. Such conjugates, upon injection, should be directed by the monoclonal antibody part of the conjugate to target cells; they would then bind to and kill those cells with the killing done by the toxic molecule part of the conjugate. Immunotoxins will, in time, find wide application in the treatment of tumors and autoimmune diseases and in diminishing host responses to organ and tissue grafts.

Another application for monoclonal antibodies, albeit largely speculative, is the management of drug dosages and minimizing the side effects of drugs. Certain drugs when administered in rather high doses to provide the maximum beneficial effect, may have unpleasant or dangerous side effects. The administration of a monoclonal antibody against that drug, at an appropriate time

following treatment with the drug, could be used to reduce or eliminate the side effects. Monoclonal antibodies against digoxin have been used in limited trials for minimizing side effects of the drug administered to patients suffering from certain cardiac disorders.

We can expect many clinical applications of monoclonal antibodies. The major limitation today to the therapeutic application of monoclonal antibodies is the fact that they are seldom human antibodies, but instead most are of rodent origin. When human monoclonal antibodies become available, it is likely that they will be rapidly and widely applied to the treatment of many human diseases. Currently, a great deal of effort is being expended by NIAID grantees on developing methods for obtaining monoclonal antibodies that are largely, or entirely, of human origin. Several different, promising, approaches are under scrutiny.

AIDS VACCINE

Question. Dr. Fauci, this Committee has heard before that vaccines are the most cost effective way to control infectious diseases. Since we now know that AIDS is an infectious disease of the immune system, what are you doing to develop a vaccine against this devastating viral disease?

Answer. In addition to the activities of our intramural scientists led by Drs. Bernard Moss and Malcolm Martin who are involved in several AIDS vaccine related activities, we have established a Prevention Branch in our Extramural AIDS Program to manage those types of activities.

In July 1986, we convened an AIDS Vaccine Workshop at the NIH to review the state of the art and the current status of vaccine development activities at that time in order to provide guidance to the NIAID for its vaccine development activities. The workshop pointed out several areas of vaccine-related work that needed support to optimize vaccine research and development activities. They are:

Quantitative assays for the HIV virus.
Better neutralization assays for antibodies.
Development of animal models other than chimpanzees.
Identification of correlates or markers of immunity.
Development of improved vaccine adjuvants.

These projects will be funded in FY 1987.

The NIAID has issued a solicitation for National Cooperative Vaccine Development Groups which will be funded in FY 1988. These groups will be supported by cooperative agreements and will involve scientists from academic or independent research institutions in collaborative research endeavors with scientists from commercial companies. The cooperative agreement permits the involvement of the government's scientific program officers in the research as facilitators of the process. We believe that this approach will do much to further the timely development of an AIDS vaccine.

On March 25-27, another large Scientific Workshop on AIDS Vaccines was held. It was sponsored by the United States Public

Health Service AIDS Task Force Subgroup on Vaccine Development and the United States Army Medical Research and Development Command. This meeting will help guide our future AIDS vaccine efforts.

ROTAVIRUS DIARRHEA

Question. Dr. Fauci, I understand that one of the most important causes of serious illness and death in infants worldwide is diarrhea caused by rotaviruses. Would you update us on your efforts toward the development of vaccines to prevent rotavirus diarrhea?

Answer. We are currently testing a series of oral, live vaccine candidates in the United States and overseas. One vaccine, derived at the NIAID from a strain of rotavirus that infects rhesus monkeys, is capable of safely immunizing human infants against one of the four major serotype strains of human rotaviruses. Another type of vaccine, also developed at NIAID, combines the genes of rhesus and human strains of rotavirus in such a way as to offer the good possibility of protecting against all of the four human serotype strains. This so-called reassortant vaccine is undergoing safety and potency testing now, in preparation for field trials. We are also planning to expand our epidemiological studies to determine how long immunity to rotavirus serotypes exists in children, how much antibody is required to protect, and how often infection with one serotype will confer immunity to reinfection with another serotype. These are important questions that must be answered in parallel with vaccine testing. We are in the process of adapting newly developed monoclonal antibodies to rapid and sensitive diagnostic assays for rotavirus serotypes, which will help us better evaluate the effectiveness of any vaccine. Rotavirus research is one of the most exciting and rapidly moving areas of infectious disease research.

ASTHMA

Question. Dr. Fauci, there is so much public attention on diseases such as AIDS, that we hear little lately about the long term and often crippling effects of other diseases such as asthma. Would you please tell us about your Institute's work on this disease and give us an update on any advances in asthma research.

Answer. While no miracle cures have been found for this problem, asthma research at NIAID is progressing on several fronts.

A link between sulfiting agents (used as anti-browning substances in foods) and asthma has been established and currently is being pursued. Researchers at an NIAID Asthma and Allergic Disease Center estimate that 5-10 percent of all asthmatic patients in the United States are sensitive to these sulfiting agents. The pathogenesis is unknown but several hypotheses are currently being studied. These theories include: 1) irritant receptors, 2) IgE-mediated hypersensitivity, and 3) decreased activity of enzymes to metabolize sulfites. Tests are being established to identify who is at risk (oral and inhalation challenges).

A wide variation in autopsy findings among victims of asthma death warrants further study, and a cooperative study among medical centers capable of comprehensive monitoring of autopsy data throughout the United States is in the planning stage. These data

will be correlated with clinical, pharmacologic and epidemiologic findings, both in individual cases and on a national basis, in order to learn the reasons for, and devise strategies to counter, the rise in asthma mortality.

The NIAID is currently supporting a cooperative multi-center study of injection treatments, also known as immunotherapy (I.T.), in adult asthmatics allergic to ragweed and house dust mites. This 5-year study, currently in its third year, involves five major medical centers, and is expected to clarify the question of effectiveness of I.T. in the management of adult allergic asthma.

A major step forward in our understanding of occupational asthma came with an appreciation of the fact that low molecular weight substances can be allergenic when coupled to human proteins; this has led to the preparation of many reagents for the diagnosis and monitoring of chemical causes of occupational lung disease. Through an NIAID-supported resource, many of these important reagents, including human serum albumin conjugates of trimellitic anhydride (TMA) and toluene di-isocyanate (TDI), are being distributed to investigators.

As more information becomes available concerning the chemicals formed in the body and their pathways that lead to inflammation inducing asthma, it becomes possible to design drugs that can counteract the generation and effects of these substances. Inhibitors of such chemical mediators of inflammation as phospholipase A_2 and lipoxygenase, which may be useful for treatment of human asthma, are already being examined.

NEONATAL HERPES AND CYTOMEGALOVIRUS

Question. A number of viruses such as herpes and cytomegalovirus cause devastating illness in newborn babies. What progress has been made in the prevention and treatment of these neonatal diseases?

Answer. Much of the damage suffered by babies infected with cytomegalovirus (CMV) results from the continued replication of the virus. Their immature immune systems cannot control the infection. Consequently, there is reason to believe that if virus replication could be inhibited, much of the medical damage might be prevented. Many drugs have been screened in an effort to identify an effective antiviral agent. Unfortunately, most drugs that are powerful enough to stop the virus are also toxic to uninfected cells. However, there is one drug, DHPG, which appears to be effective in animal models. NIAID has just initiated a trial of this drug in babies who have serious CMV infections. The drug will be used at a nontoxic dose that hopefully will still be enough to reduce the amount of virus to a level where the babies' immune systems can eliminate the infection. However, even if this strategy is successful, NIAID will continue to actively pursue the search for a truly nontoxic effective therapy since the doses of DHPG required to inhibit virus replication are only slightly lower than those that cause serious toxicity.

Genital herpesvirus infections often do not result in any symptoms even when virus replication and shedding is occurring. Therefore, babies can be infected by a mother who is unaware that

she is infected or by one who knows she is infected but has no visible lesions at the time of delivery. Fortunately, there is generally much less virus present in asymptomatic infections than in apparent ones so that the risk of transmission is thought to be comparably reduced. When maternal infection is apparent, neonatal herpes can be prevented by caesarian delivery. NIAID is currently studying virus transmission to newborns in the absence of symptomatic maternal infection. The value of prophylactic acyclovir therapy will be determined for babies from whom virus can be cultured but who are not apparently ill. In addition, the results of treatment of symptomatic babies with two different drugs, vidarabine and acyclovir, are being compared. A newly initiated study will evaluate the efficacy of long term therapy with an oral preparation of acyclovir in preventing recurrences and neurologic damage in babies with mild neonatal herpes. These trials should result in the identification of optimal therapy currently available for these babies and also provide epidemiologic data that will help prevent future infection.

In the area of prevention, NIAID is also supporting research toward vaccine development both for herpes and cytomegalovirus.

PERTUSSIS VACCINE

Question. Dr. Fauci, many parents have a deep concern about giving their children many of the vaccines that are required in this country, particularly the pertussis or whooping cough vaccine. Would you please update us on the status of the development of an improved, safer pertussis vaccine.

Answer. Efforts to develop an improved pertussis vaccine which is safer than the conventional product continue to show progress at several levels. One of the most significant studies, at present, is an ongoing efficacy trial in Sweden, partially supported by NIAID. In this study, two different acellular pertussis vaccines, manufactured in Japan, are being evaluated to determine their ability to protect against disease. The study should give us information about serological correlates to protection in addition to information about the safety of the vaccines. The study will terminate in August, 1987, and the data will be analyzed and disseminated by March, 1988. Similar efficacy trials to test other acellular pertussis vaccines are now in the planning stages and should provide additional information on dose, vaccine schedule, and the types of antigens needed to provide protection.

There are at least a dozen vaccine manufacturers who are actively involved in the development of acellular pertussis vaccines using new and highly advanced methodologies. Many of these manufacturers are located outside the United States, but all have an interest in providing a safe and immunogenic vaccine which can be licensed and marketed in the United States in the near future. Several of the more recent approaches involve the use of recombinant DNA techniques for production of specific antigens that can serve as potential vaccines. These "third generation" vaccines offer the greatest opportunities for the development of safe and effective pertussis vaccines.

Several phase I clinical trials are scheduled to begin within the next 2-3 months in NIAID supported vaccine evaluation units, as

well as other clinical sites throughout the United States. These studies will test the safety and immunogenicity of four new acellular vaccines in both children (4-6 years and 18 months) and infants (2, 4, and 6 months). Data will be available for most of these trials within approximately one year after the onset of the study.

Basic research on pertussis continues to be supported by several Government agencies. The NIAID currently funds 14 grants in areas such as disease pathogenesis, purification of pertussis antigens, and procedures for inactivating the pertussis toxin. At the NIAID intramural Rocky Mountain Laboratories, work is continuing on the use of recombinant DNA techniques to develop a safer pertussis vaccine. In addition, the NIAID supports the efficacy trial in Sweden through the contract mechanism. The NICHD continues to devise methods for the large scale cultivation of B. pertussis and the inactivation of its potent toxin. A monovalent pertussis toxoid vaccine has been developed and clinically tested in adults and 18-month-old infants. The results revealed a safe and immunogenic product. The FDA continues to support a considerable amount of research on the development of procedures for isolating and purifying pertussis antigens, have developed animal models for evaluating the ability of vaccines to protect against pertussis, and have developed serological assays to evaluate antibody responses.

BONE MARROW TRANSPLANTATION

Question. Dr. Fauci, I have heard a great deal about bone marrow transplantation in the past year and I understand that more and more hospitals are establishing bone marrow transplantation units. Would you please update us on this area and describe any potential new applications for bone marrow transplantation?

Answer. Bone marrow transplantation continues to be the treatment of choice for aplastic anemia, certain immunodeficiency diseases and certain types of leukemias at particular stages in their course. The ideal donor of bone marrow is a sibling who matches the potential recipient for all histocompatibility (HLA) protein antigens. However, everyone in need of a bone marrow transplant is not fortunate enough to have a sibling who is an HLA match and who is willing and able to donate marrow.

Recently, major marrow transplant centers have developed procedures for transplanting marrow from siblings, parents, or children with only a portion of their antigens identical to those of the recipient. These procedures require treatment of the marrow to prevent graft-versus-host disease which occurs when the donor marrow reacts against recipient tissue, and suppresses the recipient's immune system. Several new procedures are being attempted. They include treating donor marrow and/or the recipient with monoclonal antibodies and cleansing the donor marrow of immunologically competent cells using special affinity columns or magnetic cell separation.

Expanding the range of possible donors is significant because of potential increased need for bone marrow transplantation. In addition to its current uses, bone marrow transplantation is important as a potential treatment for several chronic hematological disorders, such as sickle cell anemia and thalassemia. Bone marrow

transplantation may be the only possible means of treatment for those exposed to large doses of radiation which destroy the marrow, as occurred in a few cases during the Chernobyl disaster. Bone marrow transplantation may also be a necessary part of the therapy of AIDS.

NIAID has begun clinical trials to compare technologies used to reduce graft-versus-host disease and rejection and to determine optimal conditions for treating donor marrow and the recipient.

NEW ANTIVIRAL AGENTS

Question. Dr. Fauci, although there have been a few drugs licensed in recent years for the treatment of some specific viral diseases, I understand that very few viral illnesses can be treated with drugs. What efforts does your Institute have underway to develop effective antiviral agents?

Answer. NIAID is utilizing several mechanisms to encourage the development of new antiviral agents. We are currently supporting four groups of investigators who are developing new agents designed to control cytomegalovirus infections. These infections can be life-threatening to congenitally infected babies as well as bone marrow transplant recipients, AIDS patients, and other immunosuppressed individuals. We are soliciting cooperative agreements that will result in six to eight awards to scientists to use recombinant DNA technology to devise methods to treat many different viral infections. We have also requested that small companies submit applications under the Small Business Innovation Research Program on this subject. Furthermore, we support a series of animal models of human viral infections. These are available to scientists from universities, research institutions, and industries who have discovered a promising antiviral agent or new therapeutic method and do not have the resources to do the necessary testing.

We have a major program related to the development of effective antiviral agents against the AIDS virus. This includes drug screening, drug development, and drug testing in our AIDS Treatment Evaluation Units. Among the drugs being tested against the AIDS virus are azidothymidine, ribavirin and dideoxycytidine.

DENTAL PROBLEMS OF THE ELDERLY

Question. Last March, NIDR completed the most extensive ever oral health survey. Overall the picture shows improvement in oral health for adults and young Americans but increasing problems and needs for service with age. What are the major oral health differences among the elderly, and what are the appropriate preventive measures?

Answer. Findings from the 1985-86 National Survey of the Oral Health of Employed Adults and Older Americans revealed major differences in oral health between middle-aged adults, ages 18 to 65, and the older-aged group, ages 65 to 80+ years. The most striking difference was in toothlessness. Only 4 percent of young and middle-aged adults were missing all their teeth, and half had lost, at most, one tooth, whereas 42 percent of older adults had lost all their teeth and only 2 percent had retained all their permanent teeth.

While both employed and older Americans continue to suffer decay on the crowns of teeth to the same extent, differences were noted in root cavities, where the disease was present in 63 percent of the older adults and in only 21 percent of the employed group. In addition, advanced periodontal destruction was found in 68 percent of older Americans with teeth and in 24 percent of younger adults with teeth.

The appropriate self-care preventive measures for these diseases include the use of fluorides, the practice of daily oral hygiene, including toothbrushing and flossing, and regular professional care. Periodic check-ups are necessary for early diagnosis and prompt treatment of oral diseases as well as for preventive services. Efforts aimed at educating and promoting the oral health of middle-aged adults using available preventive measures should lead to a much better state of oral health for these Americans as they move into the retirement years, compared to today's older generation.

NIDR research plans call for identifying individuals of any age who may be more susceptible to oral diseases. To aid them there are additional preventive measures, for example, antimicrobial mouthrinses, that can be employed or that are under development.

CENTER PLANS

Question. How is the NIDR proceeding in the development of new centers as proposed in the Institute's Report to Congress in 1985?

Answer. In 1984 the Subcommittee requested a report from NIDR on its plans for using center and other large grant mechanisms. We enlisted the aid and advice of the dental community in responding to this request and our report concurred with their recommendations. In summary, we affirmed our intent to use the variety of research funding mechanisms available at the NIH, and, in particular, to expand our center program to include broad-based interdisciplinary and multidisciplinary centers as well as thematic and categorical research centers and to ensure open competition and rigorous peer review of all center proposals. Accordingly, the Institute issued a Request for Applications for Research Centers in Oral Biology (RCOBs) in December 1985, inviting the research community to develop coordinated programs of basic and clinical oral biological research. Fifteen institutions submitted applications by the December 1986 deadline, including all five institutions currently supported under the Dental Research Institutes and Centers (DRICs) program. A special review committee has already reviewed eight of these applications and will convene later this spring to review the remainder. Following secondary review by the Institute's advisory council, the NIDR hopes to fund between four and seven RCOBs by the summer of 1987.

The NIDR expects to support 16 centers by the end of FY 87. These include five Periodontal Disease Research Centers, three Caries Research Centers, one Pain Research Center, and seven DRIC/RCOB Centers. Two of the five DRICs will reach the end of their award period in FY 87. Of the remaining three, one will

terminate in FY 88 and two in FY 89, unless they are successful in competing for RCOB awards.

RESEARCH TRAINING AND DENTIST SCIENTIST AWARD PROGRAM

Question. What do you plan to do in response to the Institute of Medicine/National Academy of Sciences recommendations concerning trainees needed in the National Research Service Award programs, and could you give us an update on the special career development program to prepare new clinical investigators, the Dentist-Scientist Award?

Answer. The IOM/NAS report, Personnel Needs and Training for Biomedical and Behavioral Research, projects an increased need for dental clinical research manpower--at a minimum, 105 clinical scholars a year--by 1990. In response to that forecast, NIDR is undertaking a critical evaluation of its National Research Service Award (NRSA) program. An ad hoc panel has been convened to examine the institutional training grant (the T32 award) and held its first meeting this February. In the next few weeks there will be additional meetings of the panel, as well as a meeting with all T32 program directors. We expect to use the advice and recommendations of these groups as the basis for a plan to strengthen our research training programs to meet the anticipated demand for increased numbers of highly qualified dental clinical researchers in the decade ahead.

This year we are in our third year of the 5-year Dentist Scientist Award program and it is proceeding very well. There is enormous interest on the part of young people in this academic and professional post-graduate program, which also provides experience in conducting research, and we have had firm support by the universities and dental schools as well. By the end of 1987 we expect to have 74 candidates in both the individual and institutional programs. Our plans had originally called for adding 25 new candidates a year to reach a peak enrollment of 125 by 1989, at which time we would reach a steady state, with 125 candidates in the program and 25 graduating each year.

ADULT SURVEY FINDINGS AND PREVENTION EFFORTS

Question. What do you think are the outstanding findings in your recent national survey of adult oral health and how do you plan to use those findings in future research efforts? For example, what do you plan to do to prevent the diseases identified?

Answer. Overall, the National Survey of the Oral Health of Employed Adults and Older Americans indicated that the dental health of Americans has been improving steadily. One of the most striking findings was that only 4 percent of working adults ages 18 to 65 were missing all their teeth. Half had lost, at most, a single tooth. Working adults still experience decay on the crowns of teeth--coronal caries--but over 90 percent of these cavities had been filled. Most adults also shows signs of periodontal diseases, with increases in prevalence and severity with age.

In contrast to the employed group, the oral health of older Americans--ages 65 to 80+ years--is not as good. Forty-two

percent of this group were missing all their teeth. Decay affecting the roots of teeth was also more prevalent: Sixty-three percent of the older age group had root cavities, three times the prevalence seen in the working adults.

The survey results affirm our commitment to expand research to improve the oral health of mature adults and older Americans. We need a better understanding of root caries, which is a different disease from coronal caries. We plan to use new molecular techniques to identify individuals susceptible to caries and periodontal diseases, to sharpen our abilities to diagnose disease early, and to develop treatments aimed at reversing the pathological process and restoring the oral tissues to health.

We also intend to expand behavioral and social science research to improve preventive measures and promote their adoption, along with professional care-seeking behavior, for all age groups. The periodontal diseases and dental caries are caused by varieties of bacteria that accumulate in dental plaque. Good oral hygiene with toothbrushing and flossing can reduce plaque and prevent gingivitis--inflamed and bleeding gums--which is how periodontal disease begins. For susceptible people, including those who cannot perform adequate oral hygiene, we also have a prescription antimicrobial mouth rinse that can reduce or eliminate plaque above the gumline and so can help to prevent gingivitis as well as dental caries. We also like to remind adults that fluorides are not for children only and that community water fluoridation and the use of fluorides in other forms can protect adult teeth as well. In our efforts to identify individuals at high risk for disease we will be using new microdiagnostic techniques to detect bacterial pathogens or toxic products in the mouth. We also will continue to analyze the adult survey, looking at the demographic data in relation to health care status and treatment needs.

PLANS FOR MONITORING ORAL HEALTH STATUS

Question. What are your future plans for monitoring the oral health of Americans?

Answer. Our plans for monitoring the oral health of Americans call for repeating national surveys periodically as well as conducting smaller epidemiologic studies. We are also working with the National Center for Health Statistics to add an oral health component to the forthcoming National Health and Nutrition Examination Survey (NHANES III).

AIDS RESEARCH AND ORAL SIGNS

Question. Could you tell us something about the oral manifestations of AIDS and your research programs in this area?

Answer. The oral cavity is commonly the site of opportunistic infections such as the fungal disease, candidiasis, as well as the Kaposi's sarcoma seen in AIDS patients. Because of the failure of the immune system to mount a strong defense, these opportunistic diseases can be severe and even life-threatening if and when they spread to the lungs or to the digestive system. Dental researchers have also observed an oral soft tissue

abnormality that appears to be unique to AIDS patients, called hairy leukoplakia. Papilloma, Epstein-Barr and herpes virus infections, severe periodontal diseases, abscesses, and pain associated with nervous system pathology are other oral manifestations well documented in AIDS patients.

Salivary gland researchers have been exploring the source of the AIDS virus which has been recovered from saliva. Their findings suggest that the virus is not secreted by any of the salivary glands. Rather, the presence of the virus in so-called whole saliva is probably the result of contamination by blood serum associated with oral and periodontal diseases.

Current research on AIDS supported by NIDR includes studies of salivary gland changes and other oral tissue changes during the natural history of the disease. Saliva contains numerous defense factors, including anti-bacterial and anti-fungal components, immunoglobins and other molecules that defend against disease and maintain the health of the oral tissues. It is possible that changes in the quality or quantity of salivary components may precede overt signs and symptoms of AIDS and thus serve as an early warning system indicating that a patient at risk may develop frank AIDS. Accordingly, we are now studying AIDS-positive individuals and those in the early stages of disease in several epidemiological longitudinal studies conducted in collaboration with other Federal agencies. Other investigators are characterizing the specific defense factors present in saliva and exploring new means of prevention or treatment of oral infections. For example, NIDR staff scientists are modifying an intra-oral device for the slow release of anti-fungal drugs. Use of an antibacterial mouth rinse is also under study. NIDR pain specialists are testing drugs to treat painful neuropathies in AIDS patients.

In addition to these clinical and epidemiological studies, NIDR immunologists are studying how the AIDS virus disrupts the normal functioning of certain immune cells--monocytes and B-lymphocytes. Monocytes can be infected by the AIDS virus as well as by cytomegalovirus, another virus that can cause serious infection in AIDS patients. Infected monocytes lose much of their capacity to detect and destroy pathogens, and because they are not killed by the AIDS virus, may serve as a reservoir and conduit for the virus in spreading to various parts of the body. As well as determining the effects of AIDS infection on these cells, NIDR staff scientists are working to develop ways to eradicate the virus and enhance the immune defense system of AIDS patients. One method under study makes use of a new technique for making human monoclonal antibodies which could be targeted to the AIDS virus.

IMPLICATIONS OF PERIODONTAL DISEASE RESEARCH

Question. Please describe how some of the basic research you are supporting on the periodontal diseases may pay off in terms of improved diagnosis and treatment of disease.

Answer. We are aiming to identify patients at risk for periodontal diseases so we can either prevent disease or intervene early to control or reverse the disease process. We can now use digital subtraction X-ray techniques to detect signs of bone loss

not seen on conventional x-rays and with less radiation exposure. We held a workshop last fall to review a wide range of new diagnostic approaches, including the use of nuclear medicine techniques to detect changes in bone metabolism, and magnetic resonance imagery, which can be used to study the oral soft tissues.

We are also sampling saliva and gingival fluid for disease markers, such as inflammatory products, specific enzymes, and pathogens. As aids in this approach we are now able to use genetic probes and monoclonal antibodies to identify specific bacteria or specific factors produced by the host immune system in response to infection. Some of these molecular tests have reached the point where they can now be marketed in kit form for use by dental practitioners.

We feel that many of these techniques, as well as what we have learned about the basic disease process seen in the more common form of adult periodontitis, should be applicable to the study and understanding of other slowly progressive, inflammatory or degenerative diseases affecting bone and joint tissues, such as osteoporosis and arthritis.

BLOOD SHORTAGES

Question. Dr. Lenfant, while last year approximately 3.8 million Americans received transfusions of whole blood or blood products, today we hear of a national emergency due to severe blood shortages. What changes have occurred to cause this severe shortage of blood supply?

Answer. AIDS and, to a lesser extent, other problems have caused the emergence of severe blood shortages, particularly in large Metropolitan areas. A combination of public fear of AIDS, the incorrect belief of one-quarter to one-third of adult Americans that the AIDS virus can be transmitted by blood donation, self-deferral of members of groups at high risk to AIDS, and exclusion of all donors who test positive for the AIDS virus has significantly reduced the number of Americans willing and able to donate blood. In addition to these AIDS-related factors, new tests to eliminate units of blood which can transmit non-A, non-B hepatitis from the blood supply has resulted in fewer units of blood being available for transfusion.

Question. Is it due to the public's fear of AIDS?

Answer. The shortages in the blood supply are certainly made worse by the public's fear of AIDS. Other factors contributing to the shortage are increased use of blood for new methods of treating disease, and an increased rate of discarding possibly contaminated blood.

Question. Is the National Heart, Lung, and Blood Institute doing anything to help meet this national crisis?

Answer. The National Heart, Lung, and Blood Institute is doing a number of things. First, we are supporting programs to increase the use of autologous transfusion (predeposit of their own blood by patients before surgery) thereby lessening the demand

for blood donated by others. Second, we are supporting education programs through our 21 Transfusion Medicine Academic Awardees to help reduce the overuse of blood. Both of these programs are directed at conserving the available blood supply. Third, the Institute, in conjunction with major professional and voluntary organizations representing donors, blood centers and hospitals, and health care professionals, is developing a major national education effort to promote an adequate and safe supply of blood and to enhance a more effective and economical use of blood and blood products. This effort will be modeled after the very successful National High Blood Pressure Education Program.

HEART DISEASE - SPECIAL PROBLEMS FOR BLACK AMERICANS

Question. Nearly half of the deaths in the nation in 1985 were due to cardiovascular disease, and coronary heart disease is the leading cause of premature disability in the United States work force accounting for 19% of the disability allowances of the Social Security Administration. What has recent research shown to explain the higher stroke and heart disease rates among Black Americans, and what progress is being made to bring down the higher death and disease rate among blacks, and in fact among all Americans.

Answer. Black Americans suffer a disproportionately high toll from stroke and heart disease compared with the nonminority population. Each year, over 19,000 blacks under 70 years of age die from stroke and heart disease who would not have died if that group had the same death rates from these causes as other Americans. Causes of this disparity are not entirely clear. Research shows that a combination of higher rates of risk factors among blacks including hypertension, diabetes, and obesity, together with such socioeconomic factors as lower rates of referral to cardiovascular specialists, use of emergency services for routine care, and inability to purchase medication for hypertension are probably responsible.

All Americans with heart disease or cardiovascular heart disease (CHD) risk factors benefit from basic and clinical research supported through the Institute such as the clinical trials of nonpharmacologic regimens for hypertension prevention, evaluation of a drug to prolong survival in patients with left ventricular dysfunction, and systolic hypertension in the elderly. Additionally, the NHLBI has identified areas of greatest research need specific to heart disease and stroke among blacks and other minorities. Three ongoing studies investigate CHD and risk factors in specific black populations: the NHLBI Growth and Health Study on development of obesity in adolescent females; Atherosclerosis Risk in Communities to study risk factors among middle aged adults including a black community, Longitudinal Studies of CHD Risk Factors in Young Adults,which follows changes in risk factors among black and white males and females. Research initiated in FY 88 will support interdisciplinary studies of the influence of individual behavior and the health care environment on patterns of CHD morbidity and mortality among blacks.

The National High Blood Pressure Education Program continues efforts designed to reach minority communities. Progress has been encouraging. By 1980, black adults were more likely to be aware

of their high blood pressure than whites and were nearly as likely to have their hypertension controlled. This may be related to the marked 51% decline of stroke mortality among blacks observed between 1968 and 1982. These research efforts are dedicated to finding ways to bring down the higher death and illness rates suffered by blacks and to contribute to improved health of all Americans

HEART DISEASE AND THE ELDERLY

Question. In Florida and the Nation heart disease is the leading cause of death in our large elderly population. In your general statement you cite significant declines in mortality from cardiovascular and blood-clotting diseases but increased mortality from chronic obstructive pulmonary disease. To what environmental and physiological factors do you attribute these decreases and increases--and what prevention strategies are being developed to further decrease the heart disease mortality rate?

Answer. Reasons for the decline in coronary heart disease mortality among the elderly are not known precisely. A variety of environmental and physiological factors, as well as advances in medical care, have contributed to this decline which is due in part to a reduction in incidence of disease through primary prevention and in part to a reduction in deaths among those with clinical disease. Both better medical care and improved lifestyles have contributed to reductions in the major risk factors, including elevated blood pressure and lipids and cigarette smoking. Rates of cigarette smoking have declined and there have been reductions in serum cholesterol levels brought about through changes in diet. A higher proportion of hypertensives have their blood pressure lowered through the use of anti-hypertensive medication and non-pharmacologic interventions. For those with clinical coronary heart disease, reductions in mortality probably result from improved treatment of out-of-hospital cardiac arrest through use of the emergency medical systems and cardiopulmonary resuscitation. Advances in hospital care include the use of coronary care units, advances in pharmacologic treatment of arrhythmias in thrombolysis and in surgical treatments including coronary artery bypass surgery. Improvements in treatment of chronic coronary heart disease include advances in diagnostic procedures, the use of drugs to control angina and rhythmic disturbances as well as interventions such as balloon angioplasty and coronary artery bypass surgery.

Epidemiologic studies developed by the National Heart, Lung, and Blood Institute are seeking new risk factors in studies such as Coronary Artery Risk Development in Young Adults (CARDIA), and the National Growth and Health Study and the Study of Atherosclerosis Risk in Communities (ARIC). Preventive interventions include the Trial of Hypertension Prevention, the Dietary Intervention study in children with elevated LDL cholesterol and the Childrens Activity Trial in Cardiovascular Health. The goals are to recognize increased risk at an early stage before disease is present and to develop strategies for reducing risk. At the community level improved lifestyles are being encouraged and evaluated through strategies directed at the general population.

Mortality from chronic obstructive pulmonary disease (COPD) is apparently increasing. According to data from the National Center for Health Statistics, there were about 70,000 deaths attributed to COPD in the United States in 1985. The overall death rate for COPD has risen by about 20 percent from 1979 to 1983, making it the fifth leading cause of death. In addition there is substantial disability from work and decreased quality of life among the thousands of COPD patients in this country. Cigarette smoking is the most important factor responsible for the increase in mortality due to COPD. The National Heart, Lung, and Blood Institute will conduct a national meeting this fall on the "Rise in COPD Mortality" in order to identify additional reasons associated with this increase and recommend ways by which it can be reduced.

PULMONARY EMBOLISM STUDY

Question. Pulmonary embolism is a major health problem that causes approximately 100,000 deaths each year and may contribute to another 100,000 deaths. We understand that a recombinant-DNA product called tissue type plasminogen activator may permit a significant reduction in deaths from pulmonary embolism. Is the Institute moving forward with clinical tests of this product, and when might it become available for general use to prevent this problem?

Answer. Approximately 50 patients with pulmonary embolism have been treated with recombinant tissue type plasminogen activator (t-PA), and clots were dissolved in over 90 percent of these patients. These results are encouraging and make a case for expanded investigational use of t-PA for treating pulmonary embolism. The Institute continues to support a pilot study comparing the use of t-PA and heparin with placebo and heparin. Further clinical trials are now under consideration to establish the effectiveness and safety of t-PA compared to two other drugs currently available for dissolving blood clots. Any complications, especially those related to bleeding, need to be more carefully evaluated.

It is anticipated that t-PA will be available for general use before the end of 1987.

NHLBI MOLECULAR BIOLOGY PROGRAM

Question. We have heard of the application of new technologies of molecular biology to disease areas such as cancer, immune disorders, and neurologic diseases. Has the Institute supported or does it plan to support molecular biology research in heart, lung, and blood disease?

Answer. Heart, lung, and blood investigators are beginning to adopt the techniques of molecular biology, and molecular biologists are beginning to focus their attention on these important experimental systems. Because the application of molecular biological techniques to the physiology, pathophysiology, diagnosis, and treatment of cardiovascular, lung, and blood diseases holds such promise for significant advances, the National Heart, Lung, and Blood Institute plans to establish Programs of Excellence in Molecular Biology in fiscal year 1988.

Each Program of Excellence will have two major goals: to combine molecular biology research with basic heart, lung, and blood research, and to provide opportunities for young investigators interested in cardiovascular, pulmonary, or hematologic problems to become skilled in the experimental strategies, approaches, and techniques of molecular biology.

PREDEPOSIT OF BLOOD

Question. Dr. Lenfant, with the possibility of contracting diseases through blood transfusion, should patients who are to have elective surgery predeposit their own blood for later use during their surgery?

Answer. Yes, all patients who are medically able to do so should predeposit their own blood before elective surgery. The National Heart, Lung, and Blood Institute fully concurs with the Council of Scientific Affairs of the American Medical Association which stated, "The Council on Scientific Affairs believes autologous blood transfusions to be the safest form of transfusion therapy and endorses the use of this method of transfusion therapy."

Question. Of all the patients who receive blood in this country, how many could predeposit their own blood?

Answer. Although no national data are available, grantees of the National Heart, Lung, and Blood Institute have recently completed a study of patients at 18 large hospitals; 590, or 12 percent, of the 4996 surgical patients studied at these hospitals could have predeposited their own blood. Based on these data and information from other studies, it is possible that 200,000 or more patients could predeposit their own blood annually.

Question. Of those who could predeposit, how many actually do so now?

Answer. Again there are no good national data. However, data from a number of studies at blood centers, groups of hospitals, and individual hospitals all indicate that 5 percent or less of those who could predeposit actually do so.

Question. Are more patients predepositing blood now than in the past?

Answer. Yes, there are. Extensive media coverage of AIDS has included considerable information about the use of the patient's own blood for transfusion including the elimination of the risk of disease transmission. As a result, patient interest in autologous transfusion is increasing. Many hospitals and almost all blood centers now offer predeposit programs. It appears that the numbers of units of blood being predeposited has doubled annually for the last few years.

CYSTIC FIBROSIS

Question. I understand that there has been a breakthrough in the #1 killer of children--cystic fibrosis. What has happened?

Answer. Cystic fibrosis (CF) is the most common lethal genetic disease in Caucasian populations, afflicting approximately 1 in 2,000 live births in the U.S.A. The basic defect in CF is still unknown and a majority of individuals with this disease die before they reach their thirties. A breakthrough has occurred during the past year in the goal of identifying the abnormal gene responsible for CF. Employing recombinant DNA and molecular biologic techniques, scientists have identified unique molecular probes and biochemical markers linked to the CF gene and localized it to a specific chromosome (chromosome 7). This breakthrough now permits the identification of the carriers of the defective gene in informational families. Progress can now be expected toward cloning and characterizing the CF gene, identifying its protein product, and developing tests for prenatal diagnosis of the disease.

Another area of research which has recorded significant progress during the past year relates to the specific cellular aberration and mechanisms leading to salty sweat, usually the first clinical observation indicating CF. Investigators supported by the Institute have shown that specific gates or channels located on certain cells, which permit the normal movement of chloride ions in and out of cells, are not functioning normally in cystic fibrosis patients. Chloride ions together with sodium ions make up salt, and this defect in chloride transport in cystic fibrosis patients results in elevated levels of salt in their sweat and thickening of mucus. The precise reasons for the malfunction of the chloride channel are not yet clear, and the Institute has recently initiated a program to study the role of ion channels in cystic fibrosis and other pulmonary diseases. We are hopeful that the knowledge generated from these efforts will provide new approaches to the treatment of cystic fibrosis.

Question. What can you and the National Institute of Diabetes and Digestive and Kidney Diseases do to push cystic fibrosis research even faster?

Answer. The National Heart, Lung, and Blood Institute, National Institute of Diabetes and Digestive and Kidney Diseases, and other interested organizations can best assist cystic fibrosis (CF) research to move faster by vigorously supporting basic research into physiologic, biochemical, cellular and molecular biologic phenomena in health and during injury, even though this research does not have immediate relevance to a particular disease. Simultaneously of course, promising areas of research relevant to CF should be identified and supported. In this context, the NHLBI will continue to support research on mechanisms in the transport of ions and water across epithelial membranes which affect the properties of the mucus secreted, the nature and function of airway fluids which influence the mucociliary apparatus, neural control mechanisms in mucus secretion in health and disease, the nature of receptors for mucus secreting elements in the airways, and the etiology of pulmonary infections in CF.

Last year, the Institute conducted jointly with the National Institute of Diabetes and Digestive and Kidney Diseases a workshop on the clinical-behavioral aspects of CF. Another workshop on cell immortalization approaches useful in CF research has been planned for April 1987. In order to attract basic scientists such as molecular biologists to study problems related to CF, the Institute is supporting a number of training mechanisms, and will soon be launching a program of excellence in molecular biology. Special initiatives on the molecular biology of the airway mucus and on educational and clinical aspects of this disease are being developed for implementation in FY 1988.

MOLECULAR BIOLOGY RESEARCH PROGRAM

Question. Dr. Lenfant, I understand you are excited about the development of a molecular biology research program. How will this effort make a difference in the treatment of disease?

Answer. The application of molecular biological techniques will lead to major advances in the prevention, diagnosis and treatment of cardiovascular, lung, and blood diseases. Let me illustrate this with three general examples. First, it will be possible to locate genetic markers for risk of developing a specific disease, which will enable investigators to develop highly precise screening procedures that will identify people who are highly susceptible or predisposed to a given disorder, such as high blood pressure or coronary artery disease. These new diagnostic procedures will, in turn, lead to improved targeting of preventive measures. Second, molecular biology will provide new drug therapies, by providing the tools to rationally design new biologically active compounds, and by providing the methods to produce these clinically active compounds on a large scale. For example, important therapeutic agents such as human insulin, growth hormone, and tissue plasminogen activator have been developed through this technology. Last, the experimental strategies of molecular biology may be used to develop gene transfer techniques for correcting genetic abnormalities.

SPECIALIZED CENTERS OF RESEARCH
IN CARDIOPULMONARY DISORDERS OF SLEEP

Question. The Pulmonary Diseases Advisory Committee recently reviewed a proposal for the development of a sleep research center. As I understand, sleep apnea, a pulmonary dysfunction affects many Americans, severely inhibiting the quality of life for many, and is sometimes life threatening. How will this sleep center enhance research efforts at NHLBI?

Answer. The Pulmonary Disease Advisory Committee recommended program in "Cardiopulmonary Disorders of Sleep" as one of the highest priority areas for expansion. The goal of this program would be to improve pulmonary and cardiovascular health by developing a broad interdisciplinary research effort to integrate a number of varied scientific approaches to investigate the causes, underlying mechanisms, and course of cardiopulmonary sleep disorders. This goal can be accomplished best through research featuring a combination of clinical projects involving human subjects, and basic science projects which clearly relate to clinical cardiopulmonary disorders of sleep. Clinical

investigations would focus on the etiologies, natural history, prevention, and diagnosis of cardiopulmonary disorders associated with sleep, and the development of new interventions to ameliorate or prevent this disorder.

POSITRON EMISSION TOMOGRAPHY

Question. The rising cost of health care is a concern to all of us. While the U.S. may lead the world in advances in medical technology, treatment and diagnosis, many cite the utilization of these new technologies as a major factor in the escalating cost of health care. For example, how widespread is the use of the Positron Emission Tomography (PET) in the diagnosis of cardiovascular disease?

Answer. Positron Emission Tomography (PET) is a nuclear medicine procedure in which the subject is intravenously injected with a positron emitting isotope, and a special electronic camera detects the occurrence of radiation resulting from electron-positron collisions. Each collision leads to 2 gamma ray emissions directed oppositely from each other; thus a camera which encircles the patient allows precise location of the collision when emissions are coincident. The potential special diagnostic value of this technology to cardiology is in the determination of metabolic activity or of blood perfusion through use of isotopes which can differentiate normal tissue from ischemic or infarcted tissues of the heart. PET is also useful for monitoring how well injured cardiac tissue recovers metabolically after intervention such as coronary thrombolysis.

There are about 12 PET centers in the United States and perhaps another 10 or 12 either under construction or being considered for purchase. Most PET systems are devoted to a mix of research studies and special patient examinations.

Question. What is the approximate cost?

Answer. The cost of typical cardiac metabolic study is $1000 to $1500.

Question. Does the technology complement or replace standard EKG tests?

Answer. PET does not replace the standard resting or exercise electrocardiogram. PET allows determination of metabolic state or blood flow while the electrocardiogram provides information about electrical activity of heart cells. The procedures are complementary.

BENIGN PROSTATIC HYPERPLASIA

Question. This year because of the President's operation, we have all been reminded of the importance of prostate problems for men. Are there any new developments in this area?

Answer. Enlargement of the prostate is considered to have reached epidemic proportions in the U.S., affecting 95 percent of men in their seventies and eighties and often requiring surgery.

This type of surgery is the second most common surgical procedure in men. Though the cause of prostate enlargement is unknown, NIDDK grantees have recently discovered a growth factor that is specific to the prostate. This is the first such factor to be isolated from the prostate, representing a major breakthrough in understanding prostatic growth. The newly discovered growth factor requires a cofactor to cause tissue enlargement. Surprisingly, researchers found that the male hormone, androgen, is not the cofactor. The availability of this growth factor will open up entirely new avenues of research by enabling scientists to examine the effects of other hormones on cells of the prostate. In addition, NIDDK researchers have recently been able to isolate the glandular and interstitial elements of the prostate, making it possible to conduct research on each component separately. Finally, three of the applicants for the George O'Brien Centers proposed research that directly addresses prostate enlargement.

KIDNEY STONES

Question. In your opening statement, you report on a new method for dissolving cholesterol gallstones that offers promise of reducing the $2.5 billion spent annually on gallstone surgery, and you cited a possible savings of $645 million per year from a new drug therapy for kidney stones. Can you tell us more about this?

Answer. We have just completed a long-term clinical trial that confirms the effectiveness of a highly promising drug therapy for kidney stones. In these studies, potassium citrate dramatically reduced the rate of kidney stone formation in more than 86 percent of patients who regularly form more than three stones a year, and reduced this rate in 96 percent of patients who form less than one stone a year. The treatment was found to nearly eliminate the need for surgery in these patients. The treatment of kidney stones with potassium citrate could result in a yearly savings as great as $645 million by helping patients avoid salary loss and surgery.

DIABETES PREVENTION AND TREATMENT

Question. Diabetes is a serious public health problem in Florida affecting an estimated 700,000 Floridians. Two-thirds of the cases are among the elderly. What, if any, are the best prevention strategies to the development of diabetes? Are we anywhere near the realization of a cure for diabetes? What are the most effective treatments, especially for the elderly?

Answer. At the present time, there is no effective preventative strategy for Type I -- Insulin-dependent, formerly called juvenile-onset -- diabetes although there are intriguing new experiments that suggest that we may be able to identify patients at risk and prevent this form of diabetes with new drugs that modify the immune system. Most patients, and especially the elderly, have Type II -- Noninsulin-dependent, formerly called adult onset diabetes. This form is highly correlated with obesity and age. It would appear that the prevention of obesity in this patient group would abort the development of diabetes in a significant number. In fact, many who develop Type II diabetes can be "cured" if they attain normal weight.

A cure for Type I diabetes awaits the development of an effective means of replacing the lost pancreatic Beta cells either with transplanted Beta cells or with a mechanical artificial pancreas. Major roadblocks still remain to be overcome, but many earlier problems have been resolved. In the past year, we have seen the initiation of human trials of purified pancreatic Beta cell transplantation, the first implantation of a sophisticated miniature, continuous flow, variable rate insulin pump into patients and an expansion of whole and segmental human pancreas transplantation to increasing numbers of diabetic patients. Several years of study and experimentation remain before these types of cures are generally applicable. For Type II patients, normal weight attainment remains the major avenue to potential cure.

Effective treatment for Type I diabetes still centers around insulin injections and careful temporal regulation of meals and activity schedule. The cornerstone of effective treatment of Type II diabetes, including elderly patients, is proper diet for normal weight attainment in conjunction with regular exercise, within the limits of each patient's physical capabilities, supervised by a trained health care team. If such lifestyle adjustments alone do not effectively control the diabetes, then oral hypoglycemic agents or insulin injections may be necessary.

Question. The Institute is supporting a full-scale trial to determine the comparative effects of "conventionally managed" versus "an intensively managed group" of diabetes patients. According to the budget justification "important clinical insights" have emerged from this continuing program. Not only does the Institute propose to continue this program, but the number of volunteers will be quadrupled. What specifically has been learned from this trial, and what are its objectives?

Answer. Let me answer the second part of your question first. A major, if not the most important, question in the field of diabetes treatment is whether the devastating long-term complications of diabetes, such as blindness, kidney failure, and nerve damage, can be prevented or delayed with assiduous control of blood sugar levels. At the present time, our techniques for achieving "tight" control are imperfect, have significant financial costs, and may increasingly impair the patient's lifestyle with frequent injections, blood testing, and other procedures required. In addition, the risks of insulin-induced hypoglycemia are necessarily increased when using the more intensive therapy required to approach normal blood sugar maintenance. Therefore, it is imperative to determine if the potential benefits -- prevention of the long-term complications of diabetes -- truly can be realized. The Diabetes Control and Complications Trial (DCCT) objective is to prove or disprove this notion.

We have recently completed the feasibility phase of this trial and although the major question remains until completion of the full scale trial, we have already learned much. First, we have shown that it is possible to achieve and maintain better control of blood sugar over a long period in a large group of patients who were randomized to this form of therapy. Heretofore studies have been conducted with small groups of patients who were self selected and, therefore, already highly motivated. Second, the early DCCT

results demonstrated that increased hypoglycemia and weight gain were unavoidable consequences of tight control. Third, the trial researchers have been able to standardize all the methods used in the study so results from each patient or center can be compared to all the others. Finally, the early results have documented to the satisfaction of all of our independent oversight committees that this complicated, long-term clinical trial is feasible and holds great potential to answer the major research question.

Question. Kidney disease is one of the most devastating complications of diabetes. Can you expand on your Institute's plans for new research efforts in this area?

Answer. Kidney disease of diabetes is the most common cause of end-stage renal disease and is one of the most serious complications of diabetes. People who have diabetes comprise 28 percent of end-stage renal disease patients. In November 1986, we had a major research planning meeting on kidney disease of diabetes mellitus, which involved participants from the Federal, voluntary, health professional, and corporate sectors. Plans for research projects and conjoint corporate/lay/public financing were made. All of the participants are very enthusiastic about this initiative. We recently published a Request for Applications for new research on the pathogenesis and clinical features of kidney disease of diabetes mellitus, and would like to pursue clinical studies which aim to prevent or retard kidney disease of diabetes mellitus.

The NIDDK has recently awarded contracts for a major clinical study of kidney disease of diabetes in the Pima Indians in Arizona. Diabetes affects 50 percent of this population and kidney disease is the major medical complication. In extensive clinical studies, investigators will look at the rate at which the kidneys filter waste products, will design and evaluate therapies, and will assess the effects of diet, with the ultimate goal of preventing kidney disease.

We have also added a kidney component to our ongoing Diabetes Control and Complications Trial. This effort will help determine the relationship between blood sugar control and the development of kidney disease of diabetes in insulin-dependent diabetes.

Question. Doctor, in your opening statement you say that juvenile diabetes is believed to be caused by a combination of at least two genes. Can you tell us more about this research?

Answer. Insulin-dependent -- Type I, formerly called juvenile onset -- diabetes has a tendency to run in families, but the influence of genetic factors is complex, as evidenced by the fact that when you examine the incidence of juvenile diabetes in gentically identical twins you find that when one twin develops juvenile diabetes, the other twin has only a fifty-fifty chance of developing diabetes. Clearly, if Type I diabetes had only a genetic origin, no matter how complex, both twins would develop diabetes. Nevertheless, the fact that the unaffected twin has a 50 percent chance to develop diabetes in the future clearly indicates that there is a strong genetic influence.

The genes predisposing for Type I diabetes have not been precisely identified. At least one gene is certainly to be found on chromosome 6 in a subregion of the Major Histocompatibility Complex, a region coding for molecules important in the body's immune response. This genetic association with the immune system is consistent with the evidence that Type I diabetes is a slowly progressing autoimmune disease. The subregion on chromosome 6 associated with Type I diabetes is called the HLA-DR3/DR4 region, and over 95 percent of patients with this form of diabetes have the genes for this specific region. However, 40 to 60 percent of the general population also have these genes, so these genes can be considered predisposing at best. In addition, human pedigrees suggest that more than one gene must be predisposing for Type I diabetes. In genetically inbred rodent models that are susceptible to diabetes there clearly is more than one diabetogenic gene. In man, candidates for a second gene predisposing toward Type I diabetes include the gene for insulin on chromosome 11, a gene for a portion of the antibody molecule on chromosome 14 and another gene for an immune molecule on chromosome 2.

DIGESTIVE DISEASES RESEARCH

Question. We've been hearing about the importance of substances naturally found in both the brain and the gut. Can you tell us what these substances are and how they might be useful?

Answer. These substances are small peptides, some of which were initially discovered in the gut and later identified in the central nervous system (CNS). Subsequently, the converse has also been true, that some peptides discovered in the CNS were also found to be present in the gut. The brain-gut axis, and the peptides that are common to the brain and gut, are proving to be very exciting research areas. We now know that certain substances, produced in the brain and gut, can affect many functions of the digestive tract. These substances, called neuropeptides, point to an important role for the nervous and hormonal systems in affecting the gut. Within the past decade, over 35 neuropeptides have been discovered. They integrate the secretory, absorptive, metabolic, immunologic, and motor functions of the gut. They can, for example, affect our ability to absorb nutrients from food, influence bowel function, control stomach acid secretion, and could even govern the amount of food we eat. Cholecystokinin (CCK) is a neuropeptide that was first investigated over a half a century ago as a factor responsible for contraction of the gallbladder and for stimulating secretion of enzymes from the pancreas. With the introduction of modern assay techniques in more recent time the localization of CCK in specific tissues became possible, revealing that it is very common in the small intestine and in the brain. CCK is an excellent example of a peptide that may play a role as a gastrointestinal endocrine effector and as a neurotransmitter in the CNS. CCK has been reported to produce a variety of behavioral and physiological effects after administration into the CNS, including appetite regulation, hyperglycemia, hypothermia, and analgesia. Studies on CCK have intensified, as have studies on numerous other brain-gut peptides, with the availability of modern biological techniques allowing insight into how they work, and how they can fail to work to cause disease. Studies of neuropeptides supported by the NIDDK are giving insights into the development and causes of obesity, peptic ulcer, diarrhea, irritable bowel syndrome

and many other disorders and could ultimately lead to therapies for, and prevention of, serious digestive diseases.

DIABETES RESEARCH

Question. Doctor, each year your Institute reports new information about juvenile diabetes. Can you sum up for the committee, briefly, what is now known about this disease?

Answer. The clinical onset of insulin-dependent or Type I -- formerly called juvenile-onset -- diabetes mellitus in man is precipitated by the disappearance of pancreatic beta cells in a number sufficient to induce the classical symptoms of insulin deficiency: high concentrations of sugar in the blood, resulting in the production of ketone bodies that upset blood chemistry, and in the appearance of sugar in the urine. Although the incidence of Type I diabetes is highest in childhood and adolescence, it is now recognized that the disorder can develop at any age. The incidence of Type I diabetes also shows peculiar geographic as well as seasonal variation. Type I diabetes has a tendency to run in families, but the influence of genetic factors is complex. Only one-half of identical twins whose co-twins have developed Type I diabetes will develop diabetes. Extensive analyses of the HLA genes, the genes controlling immune recognition of self versus non-self, indicate that a certain set of genes controlling the HLA-DR3/DR4 antigens account for more than 95 percent of Type I diabetic patients.

Careful studies have shown that there are inflammatory cells around the pancreatic beta cells at the onset of clinical diabetic symptoms. This has focused interest on the pancreatic beta cells as the primary target cell in an immune-related pathological process. In addition to inflammatory cells, antibodies directed at the beta cell and at insulin are usually found in the blood of patients newly diagnosed with Type I diabetes. Since the discovery of insulin 60 years ago, the acute, catastrophic consequences at the onset of this disease have become preventable. However, diabetic individuals are at risk for the development of several devastating long-term complications, including blindness, kidney failure, nerve damage, premature cardiovascular disease, and shortened life span.

Our current understanding of Type I diabetes suggests several exciting questions. Can persons at risk for developing Type I diabetes be identified with a high degree of reliability and perhaps treated to prevent the disease? Can patients newly diagnosed with Type I diabetes be treated to suppress the final destruction of their insulin-producing cells? How can the autoimmune process demonstrated in Type I diabetes be blunted or circumvented to allow successful transplantation of pancreas or islet cells to those individuals with Type I diabetes? Can we ameliorate or prevent the complications of this disease while we are awaiting an effective cure and prevention? All of these questions are the focus of aspects of our diabetes research programs.

Question. Doctor, you say now that the gene for the insulin receptor has been cloned, researchers will be able to learn a lot

more about adult-onset diabetes. Please tell us more about this research and what you hope to learn.

Answer. In noninsulin-dependent diabetes -- Type II, formerly known as adult-onset -- there is usually sufficient insulin made by the pancreas but the body's tissues have lost their sensitivity to insulin. An understanding of this insulin resistance may hold the key to developing better treatment for this group of patients as well as possible avenues of approach to prevention. The first step in insulin action is binding of insulin to a specific receptor on various target tissues of insulin action. The cloning of this receptor provides the research community with a new set of tools to manipulate or modify this receptor in the laboratory and, by so doing, explore how insulin works in normal and disease states. The knowledge gained from these experiments will help us understand the underlying defect in Type II diabetes, and suggest better treatment, and perhaps suggest preventative interventions to avoid development of any defect.

CYSTIC FIBROSIS

Question. After so many years of intensive research, we were pleased to hear last year that the search for the cystic fibrosis gene has been narrowed. What is the significance of this discovery?

Answer. In 1985 researchers supported by NIDDK established that the gene responsible for cystic fibrosis is located on chromosome 7. Subsequently several groups of researchers have discovered genetic markers extremely close to the CF gene so that the CF gene has been localized to within a region which may contain only 5 to 50 genes. The implications of these newly discovered genetic linkage markers for diagnosis are profound. Already carrier status for the CF gene can be determined among siblings and other close relatives of affected individuals and a diagnosis can be made as early as 11 to 12 weeks for affected fetuses in families with CF. Improvements in diagnosis are only one benefit of localizing the CF gene. When the CF gene and the protein product it encodes are finally identified, new direct therapeutic interventions may result. There is strong and increasing evidence that defective regulation of the chloride ion channel is the pathophysiologic basis of CF. Ultimately it is hoped that identification of the protein encoded by the CF gene will enable us to devise a therapy for the defect in chloride channel regulation.

DIABETES CONTROL AND COMPLICATIONS TRIAL

Question. The Diabetes Control and Complications Trial is now in the full-scale phase. How many patients are being studied? How is the trial proceeding?

Answer. We are proceeding very well with this major multicenter clinical trial, which is comparing the effects of two treatment regimens on the clinical course of early vascular complications due to insulin-dependent diabetes. Over 700 volunteers have been enrolled to date, out of the 1,400 needed to complete the study, and we anticipate that recruitment will be completed by late 1988. There are now 27 centers participating in the trial, as well as one data coordinating center.

The study continues to meet the standards of quality and safety that are demanded by the independent outside monitoring groups. In fact, the progress made in pursuing the objectives of the DCCT have been recently enhanced by the addition of a highly sensitive and only recently available technique to monitor kidney function which we hope will increase the knowledge gained from this trial. The National Institute of Dental Research has offered to support a more extensive and sophisticated dental evaluation of our study population as well. Hopefully, this information will help the dental community learn more about diabetic periodontal disease which is becoming an increasing problem. In summary, the NIDDK is very satisfied with the progress of the DCCT but will continue to closely monitor this project.

OSTEOPOROSIS AND HORMONE THERAPY

Question. NIH recently sponsored a workshop on osteoporosis. What were the major recommendations to come from this workshop?

Answer. Workshop participants recommended estrogen as the most effective method to reduce postmenopausal bone loss. Because of the possibility of complications from estrogen, the panel recommended it only for women who are at high risk for osteoporosis and who have no contraindications for its use.

The workshop panel also noted that sufficient amounts of dietary calcium are necessary to maintain bone mass, especially in young people when bones are growing, and in older people who do not substitute for estrogen loss one to ten years after menopause. The panel emphasized that osteoporosis is a complex disease and is not likely to be a simple calcium-deficiency disease. The panel also said that mass radiographic screening of women for signs of osteoporosis is not warranted at this time.

Many, many questions about osteoporosis remain to be answered. Basic work is needed on mechanisms by which hormones and peptides stimulate bone formation and resorption. New risk factors to help us better predict osteoporosis risk should be sought as well as possible protective factors. Randomized long term clinical trials of therapeutic agents are needed which will assess the optimal dose and mode of therapy. Osteoporosis in certain segments of the population such as the "elderly elderly" and men requires study. Identification of subsets of the population most and least likely to benefit from a particular therapy is also needed. There is a great interest in novel approaches to stimulation of bone formation and inhibition of resorption.

ENDOCRINOLOGY RESEARCH

Question. Doctor, your Congressional Justification highlights the importance of endocrine research. What is NIDDK doing to encourage more work in this very critical area?

Answer. Yes, endocrine research is extremely important because of the vital role played by the endocrine glands and their hormones in normal growth, development, and functioning. The field of endocrine research is vast -- touching on all body functions, including many diverse diseases such as cancer and heart disease,

and dependent on reliable supplies of a multitude of hormones for study. In an effort to encourage research and to focus efforts, the Institute convened an ad hoc advisory committee in June, 1986 to identify research opportunities in endocrinology.

The Institute has since taken several actions in areas identified by the committee. First, we published a program announcement on bone active hormones -- which will have importance for osteoporosis -- in collaboration with NIAMS. Second, NIDDK will soon publish a program announcement to stimulate research on benign endocrine tumors -- a widespread problem in endocrinology. NIDDK and NIAID are jointly funding training of endocrinologists in immunology, since concepts and techniques developed in each area are highly relevant to the other. Examples include autoimmune endocrine disease and hormonal regulation of the immune system. A new contract will be awarded in late spring for the distribution of hormones and related materials for research. We will then explore the feasibility of expanding the inventory of products available.

DIABETES AND EXERCISE

Question. I was pleased to hear about the NIH Consensus Development Conference held recently on diet and exercise in adult-onset diabetes. Based on the recommendations of the conference, what would you recommend to people with this disease?

Answer. The single most important recommendation of the consensus panel was that the primary treatment for patients with noninsulin-dependent diabetes -- NIDDM or Type II, formerly called Adult-onset -- is weight loss for the 80 percent of these patients who are overweight. Exercise was recommended as a valuable aid to weight reduction. No particular method of weight loss was advocated, but it was pointed out that any method must lead to a sustained maintenance of normal weight.

Therefore, I would recommend that patients concentrate a little less on the particular types of food they eat and exert more control over the total quantity of calories consumed. They need to develop improved eating and exercise habits that they will maintain throughout their lifetimes.

Question. Intramural scientists in your Institute are conducting long-term studies of the Pima Indians in Arizona, for whom obesity and diabetes are severe health problems. Are we uncovering any clues about obesity from these studies?

Answer. Yes, we are. As a result of these studies, we now know that levels of spontaneous activity, or fidgeting, can substantially add to energy expenditure and that individual differences in both physical activity and in the resting metabolic rate appear to be inherited. NIDDK intramural scientists have constructed the first human respiratory chamber in the U.S. to measure precisely energy expenditure in normal and obese people. This research shows that the amount of energy that sedentary people use can vary by as much as 400 calories a day and that there are large individual differences in levels of spontaneous activity. Researchers also found that people who gained weight over a 5 year period had a lower resting metabolic rate than those who did not, suggesting that a low resting metabolic rate could predispose a person to gaining weight. By exploring the relationship between

normal caloric requirements and obesity-related diseases, this research could reveal the relationship between obesity and the development of adult-onset diabetes.

Question. Your Institute's intramural scientists have shown that spontaneous activity such as fidgeting makes a big difference in levels of human energy expenditure. Can we "fidget away" our hot fudge sundaes, doctor?

Answer. Our intramural scientists have found large individual differences in levels of spontaneous activity, or fidgeting, that may contribute to differences in body weight. To measure these and other differences, NIDDK intramural researchers constructed the first human respiratory chamber in the U.S. Patients stay in the chamber for several days, so scientists can measure their caloric expenditure, while monitoring their activity levels. Researchers found that the level of fidgeting can substantially add to the amount of calories people burn and that individual differences in both physical activity and in resting metabolic rate appear to be inherited. We are now studying which components of the 24-hour metabolic rate could either predispose us to obesity or let us guiltlessly eat a hot fudge sundae.

CHRONIC HEPATITIS

Question. I understand that studies by your Institute's intramural scientists suggest an effective therapy for a form of hepatitis that is sometimes transmitted through blood transfusions. Can you elaborate on this research?

Answer. New studies by our intramural scientists show that alpha interferon treatment has great potential in the therapy of several types of hepatitis. Alpha interferon induces remission in 30 to 40 percent of patients with hepatitis B. It has also been shown to inhibit the delta hepatitis virus, a newly discovered form of hepatitis that is particularly severe and thus far has not been treatable with any other drug. A very exciting finding was the improvement in 80 percent of patients suffering from non A, non B hepatitis -- a very common cause of liver disease. All three of these diseases can lead to liver failure and death. This research should have a major impact on the prognosis of patients with hepatitis.

O'BRIEN KIDNEY AND UROLOGIC RESEARCH CENTERS

Question. I am pleased to hear about your progress in establishing a program of kidney and urologic research centers in honor of our former colleague Mr. George O'Brien. What is the status of this program?

Answer. We are most pleased to report progress in establishing the new program of Kidney and Urologic Research Centers, in honor of the late George O'Brien. A Request for Applications for the Kidney and Urologic Research Centers was published and we have received 13 applications that are being reviewed. We are looking forward to funding six centers in FY 1987, at a total program cost of $4 million. These centers will focus on two very serious and costly health problems: end-stage renal disease and benign prostatic hyperplasia -- enlargement of

the prostate. The major objective of these new centers is to recruit new investigators into these two research fields, and the 13 applications satisfy that requirement very well. We greatly appreciate the support of the Congress in enabling us to begin this new centers program.

KIDNEY DISEASE RESEARCH

Question. Diabetics make up 28 percent of new patients needing dialysis. Can you tell us more about this problem and how the Institute is addressing it?

Answer. Kidney disease of diabetes mellitus is a major public health problem, which the Institute is addressing through a new, multi-component initiative. Costs for dialysis and/or transplantation of the over 85,000 end-stage renal disease patients being treated under MEDICARE are nearly $3 billion annually.

The largest single cause of renal disease is now diabetes mellitus. Diabetes accounts for nearly 50 percent of the deaths of dialysis patients and for far more than 50 percent of the total health care costs of dialysis patients, due to higher hospitalization rates. Because kidney disease progresses more rapidly in diabetes mellitus than in many other diseases, diabetics represent a disproportionately large number of young dialysis patients. At ages 25 to 30, diabetics are present in the end-stage renal disease population at 6 times the expected proportion. They represent double the expected number at the age interval of 45 to 54. At present, nearly 30 percent of new patients entering the MEDICARE End-Stage Renal Disease Program have kidney disease of diabetes mellitus. This number is increasing at a rate of approximately 2 percent annually. Therefore, within the next decade, kidney disease of diabetes mellitus will likely account for more than 50 percent of all patients in the Federal End-Stage Renal Disease Program.

NIDDK convened a major research planning meeting on this issue in November. We have started new studies of kidney disease in diabetes mellitus in the Pima Indians, who have the highest rates of diabetes in the world, and have added a kidney component to our ongoing Diabetes Control and Complications Trial. We recently published an announcement calling for research grant applications in the pathogenesis and clinical features of kidney disease of diabetes mellitus, and our advisors have recommended that we begin clinical trials in the treatment of kidney disease of diabetes mellitus. In addition we have identified several new research areas at both the basic and clinical science levels which directly address the kidney disease of diabetes mellitus problem using existing technologies and therapeutic regimens.

Question. The clinical trial you have initiated on nutrition and kidney disease could be important to prevention of chronic renal disease. Briefly, what do you hope to gain by this study, and what is its status?

Answer. This study is a multicenter, cooperative clinical trial designed to determine whether dietary protein and phosphorus restriction can slow or arrest the rate of progression of chronic renal disease. If dietary modification is efficacious, the

nutritional guidelines developed during this study will be useful for all patients with progressive kidney disease.

Preserving kidney function could markedly reduce the need for dialysis and kidney transplants, which cost almost $3 billion annually under Medicare. Even a modest prolongation of renal function could be quite cost-effective since the cost of the program is so high and is increasing at the rate of 10 percent per year. The study will also assess patient acceptance of the prescribed diets and evaluate the safety of the various regimens. We are pleased to have the collaboration of the Health Care Financing Administration in this important clinical trial.

Question. I have read very positive reports in the New York Times and elsewhere about a new drug which has cured anemia in kidney dialysis patients. How did your Institute contribute to the development of this new therapy, and what is its effect on patients?

Answer. NIDDK-supported researchers have isolated erythropoietin, purified it, and have contributed to the cloning of the human gene for this hormone. These events have enabled the synthetic production and testing of this hormone for treating the anemia of End-Stage Renal Disease patients. Results from an NIDDK-supported clinical trial give overwhelmingly positive results of the benefits of this therapy. Remarkable improvements in anemia were seen with no observable side effects. In this and other recent studies, erythropoietin-treated patients had a dramatically improved sense of well-being, better peripheral circulation and heart function, and better appetite and tolerance to exercise. Until now anemic kidney patients have been treated with blood transfusions, which could expose them to blood-borne infections such as hepatitis and to chronic iron accumulation, which could be toxic. Thus, this new therapy represents one of the most significant advances in clinical hematology and in the treatment of end-stage renal disease in recent years. It has the potential of providing for the better rehabilitation of ESRD patients, and thus of lowering the costs of this program.

DIGESTIVE DISEASES

Question. Dr. Gordon, a couple of years ago, NIDDK developed a Digestive Disease Centers Program that has been highly successful. Can you highlight some of the important advances?

Answer. Yes, there are currently 12 digestive disease centers funded by the program. They conduct studies of liver diseases and disorders, inflammatory processes in the digestive tract, gastrointestinal motility, gut absorption and secretion processes, and fundamental studies of the structure and function relationships in the digestive tract. The centers offer the opportunity for researchers to move rapidly into a variety of important areas as opportunities to study digestive diseases present themselves. They provide shared research resources, an opportunity for pilot studies, and the promise of improvements in diagnosis and treatment of digestive diseases.

At the University of Colorado Digestive Diseases Center, studies are being conducted on a group of sickle cell anemia

patients with gall bladder disease. The goal is to understand formation of sludge and pigment gallstones in these patients. Measurements are being made of bilirubin production rates, bile acid metabolism and gallbladder function. Gallbladder volume and emptying are measured in these studies using ultrasonography, an important, non-invasive study technique. While this study is at a very early stage, it has been found that gallbladder sludge and gallstones are highly prevalent in this patient population. These studies are continuing, with the goals of contributing to the special needs of sickle cell anemia patients, and to the ultimate benefit of gallstone patients in general.

A major project on gut motility is supported at the Digestive Diseases Center at the University of Iowa. Central to this study is the development of a device that will allow the measuring of gut motility in a person in the normal course of their daily activities rather than in a hospital setting. A team of engineers headed by Dr. Thomas Brown of the Department of Ortho-Surgery collaborated with Dr. Robert Tucker of the Department of Pathology and Dr. Robert Summers of the Department of Internal Medicine on this project. Their studies demonstrated that the measurement of gut motility obtained with conventional instruments is imprecise and thus can be misleading. This finding led to the development of an improved, high resolution motility probe for use in ambulatory studies. This advance in technology is being exploited in research, and offers a means to better diagnosis, treatment, and prevention of motility disorders.

The Digestive Disease Center at New England Medical Center and the Tufts University Health Sciences Campus is devoted to studies of the causes and treatment of diarrheal diseases. These disorders account for a major portion of missed time from work and school in North America, and for a significant percentage of the mortality in adults and children in the developing world. Important advances in the cell biology of the gut are enabling investigators in this center to use unique cell lines to study human intestinal function. Researchers are using these cells to study how the intestine manufactures lactase, the enzyme required for digestion of milk. It is hoped that these studies will identify mechanisms of milk intolerance associated with intestinal infection and will increase our understanding of how the intestine provides enzymes to maintain normal nutrition. Another group of investigators is studying the mechanisms by which Shigella causes diarrhea. Shigella is one of the principal bacterial causes of diarrhea throughout the world. These investigators have found on the intestinal cell a binding site by which Shigella toxin causes diarrhea. Furthermore, the gene for this toxin has been cloned, enabling much more accurate and much less expensive study of the toxin and its effects. The information being gained offers quicker progress to understanding the way in which the disease is established, and in achieving preventive methods, including the development of vaccine.

Studies at the University of Minnesota include consequences of liver transplantation in patients with certain liver diseases and other studies associated with advanced liver diseases.

Liver transplantation has become the major therapy for patients with several kinds of end-stage liver disease and has

expanded rapidly in use during the past three years. A major focus of studies in liver transplantation at the University of Minnesota is to determine how the donor liver may be preserved more adequately. Energy metabolism is being evaluated to determine if it predicts how the liver will function after transplantation, and various manipulations are being done to alter high energy metabolism. Nuclear magnetic resonance, which is a new method for studying energy metabolism in tissue, is being used in laboratory animals to evaluate this process. Ultimately this method may be applied directly to the patient who has undergone liver transplantation.

A major consequence of advanced liver disease is altered nutrition. Abnormalities in amino acid metabolism have been well described, but their consequences are uncertain. Through studies designed to normalize the abnormalities in amino acid metabolism, it is being determined whether parameters such as brain function and tissue growth can be improved in patients with advanced liver diseases. This is particularly relevant to the infant with liver diseases who is not growing properly. A newer area of investigation involves the study of fatty acid metabolism in patients with advanced liver disease. Fatty acids are the precursors of many important compounds in the body. Studies are being done to determine if there is an abnormality of fatty acid metabolism in patients with advanced liver disease and if so, to determine if dietary manipulation of fat intake may reverse some complications. One complication which may be altered is the kidney failure which develops in patients with advanced liver disease.

These are just some of the examples of major scientific advances made by our Digestive Diseases Centers Program. In addition, similar scientific advances have been made in our other centers: at UCLA-Harbor General on inflammatory bowel diseases; on inflammatory processes at the University of North Carolina; on molecular pathophysiology of digestive diseases at the Mayo Foundation and the University of Michigan; on the role of the mucosal barrier in healthy and diseased states at Beth Israel Hospital/Harvard University; and the study of liver disease, hepatic metabolic functions, hepatic fibrogenesis, and bile secretions at Yale University, Albert Einstein College of Medicine and the University of San Francisco.

Understanding the mechanisms by which normal and abnormal digestive processes occur will aid researchers in developing new methods for improved diagnosis and early detection, improved methods of treatment, and possible methods of prevention of these disabling and sometimes life threatening disorders.

Question. Dr. Gordon, our committee report last year requested a report on the need for training of researchers in digestive disease. Can you give us a quick summary of the recommendations made?

Answer. Yes, the Committee requested a report on the trends in the various research training mechanisms used in digestive diseases, and a projection of research manpower needs and required funding levels to meet those needs. NIH responded to this request in February, 1987.

The National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) is the lead Institute in digestive diseases research and research training at the National Institutes of Health. The report prepared by NIH provided trend data on digestive diseases research training and on the directly related career-bridging awards, supported through the Division of Digestive Diseases and Nutrition, NIDDK. These data cover the two categories of support used for developing research manpower relating to digestive diseases: 1) the National Research Service Award (NRSA) Institutional Training Grants and Individual Postdoctoral Fellowships, and 2) the career awards.

The report reviewed the recommendations of the National Commission on Digestive Diseases in its 1979 report to Congress, and the report of the successor to the Commission, the National Digestive Diseases Advisory Board. These reports continue to serve as the authoritative source of research training needs in digestive diseases.

The trends in support of the two National Research Service Award mechanisms for training in digestive diseases -- the Institutional Training Grant and the Individual Postdoctoral Fellowship Award have been, in general, downward. Similarly, the trends for support of career award mechanisms -- the Clinical Investigator Award and the Research Career Development Award have been downward. The Fiscal Year 1982 levels of support for these mechansisms that were recommended to Congress by the National Commission on Digestive Diseases in their report of 1979 have not been met as of Fiscal Year 1987.

ADMINISTRATIVE REVIEW OF PROGRAMS

Question. Public Law 99-158 required a review of the programs in your Institute from an organizational standpoint. Was this review held, and what were the results?

Answer. I'm pleased to report that the administrative review of NIDDK's research programs was conducted in July 1986 by a committee of senior NIH officials and expert consultants, established by the Director of NIH. As a result of this review, which included a public hearing to obtain the views of health professional and voluntary organizations, the committee found the Institute to be internally logical and cohesive. No changes to that structure were thought to be beneficial; the current organization of NIDDK was determined to be appropriate to its scientific programs.

CYSTIC FIBROSIS

Question. How close are you to a cure for Cystic Fibrosis?

Answer. In the past few decades the prognosis for a child diagnosed with CF has greatly improved. Twenty years ago children often died in the first few years of life. Now these children are living into their twenties and thirties. Advances in the therapy of infections and of pulmonary and pancreatic dysfunction have led to this increase in life expectancy. Despite these advances in supportive therapy, CF patients, their families and physicians have been frustrated by the absence of a therapy directed at the basic

defect underlying the pulmonary, pancreatic and sweat salt abnormalities.

Only a decade ago we called CF a "disease in search of an idea." We had virtually no clues to this puzzling disease. Today the research ideas and tools are at hand. Scientists are approaching the underlying pathophysiology in CF from two directions. On the one hand scientists have localized the CF gene to a narrow region of the chromosome and expect to isolate it and identify its protein product. On the other hand, scientists are characterizing the defect in chloride ion transport which is believed to be the biochemical basis of CF. NIDDK grantees recently discovered that the chloride channel itself appears to be intact in CF. The abnormality appears to lie in the regulation of the channel. This is a very encouraging finding because an abnormal regulatory factor is likely to be much more amenable to a direct therapeutic intervention than a structural defect in the channel itself. It is postulated that the CF gene may code for a protein which is a regulatory factor for the chloride channel but this remains to be proven. Progress in the identification of both the CF gene and the biochemical defect in the regulation of the chloride channel has been dramatic in the past two years. Until the gene product and the biochemical defect are characterized, we will not know how amenable the biochemical defect will be to therapy. However, there appears to be a very good chance that the recent remarkable breakthroughs in our understanding of this disease will lead to a breakthrough in therapy.

KIDNEY AND LIVER TRANSPLANTS

Question. Through the media, we have become very much aware of the growing success of kidney and liver transplants. What role has your Institute played in the improved surgical techniques, drug treatment and donor selection? Have you been involved in the need to increase donor participation and expeditious collection of transplantable organs? What are some methods employed by states and local organizations to increase donor collections and to further public education?

Answer. We have supported research in the prevention of transplant rejection through the use of the new drug cyclosporine and the use of transfusions to prevent hypersensitivity to the donor kidney. We also support basic research in the area of preservation of kidneys prior to transplantation and on the immunologic mechanisms operative in the renal transplant recipient.

In the area of liver transplantation, we have supported Dr. Thomas Starzl, currently at the University of Pittsburgh, for over 20 years. He is the surgeon who developed liver transplantation to the successful procedure it is today. In addition, he has trained most of the liver transplant surgeons operating at the almost 50 centers performing liver transplantation. Dr. Starzl is still doing research on improving the drug regimen used to prevent rejection and to improve donor liver preservation. He is also extending to above 50 the age of the group in whom liver transplants are being studied, as well as the age of the potential donor. The liver does not seem to deteriorate in function as it ages.

We have stimulated the area of liver preservation by issuing a request for research grant applications into improvements in the method of preserving the donor liver for longer time periods and were able to fund 3 awards.

Some of the states are requiring hospital personnel to ask each family of potential organ donors for permission to harvest donor organs. This increases the awareness of the families and should result in an increased number of organs. In addition, more surgical teams are harvesting multiple organs from the same donor. The American Liver Foundation has tried to increase public awareness of the need to become an organ donor by supplying organ donor cards, publicizing the fact in the "Dear Abby" column and providing educational material to the public and to patients.

ALZHEIMER DISEASE ADVANCES

Question. Recent Advances in Alzheimer's research indicate that Alzheimer's is a genetically caused disorder. Does this suggest a cure is now closer at hand or do we become slightly more fatalistic about preventing and curing the disease?

Answer. In recent months, there has been significant research progress in the molecular genetics of Alzheimer Disease (AD). Previously, it has been shown that there appears to be a subgroup of AD is that familial and presumed to be autosomal dominant with incomplete penetrance. In the autosomal dominant families, AD tends to occur at a substantially earlier age. Estimates of the proportion of familial AD cases range from 5 to 90 percent, but are typically estimated to be about 30 percent of all AD cases.

Using genetic linkage analysis with DNA markers in four large AD kindreds, Dr. Peter St. George-Hyslop and co-workers at the NIA-supported Massachusetts Alzheimer Disease Research Center has associated a small region of chromosome 21 with AD. Within this same region, they have also localized the amyloid beta peptide gene. The association between chromosome 21 and AD strengthens the apparent relationship between Down's Syndrome (DS) and AD since there is a high incidence of AD-like neuropathology in older DS patients and that DS results from a trisomy on chromosome 21.

Pathognomonic for AD is the presence of amyloid plaques and neurofibrillary tangles within the hippocampus and temporal and forebrain cortex. The DNA encoding this amyloid also has been isolated, cloned, characterized, and located on the same region of chromosome 21 by Dr. Dmitry Goldgaber of the National Institute of Neurological and Communicative Disorders and Stroke Intramural Program and by Dr. Nikolaos Robakis at the New York State Institute for Basic Research under grant support by the National Institute on Aging (NIA). This gene has been detected not only in AD patients but in several other species of aged mammals by another NIA grantee, Dr. Dennis Selkoe, in association with investigators from the Johns Hopkins ADRC.

Whether the amyloid gene and the segment of DNA associated with familial AD are the same or only in close proximity on chromosome 21 remains to be established. These studies, will be instrumental in stimulating further research on the molecular biology of AD, the molecular identification of a potential gene locus involved in the

etiology of AD, and its potential use as a genetic marker for those at risk for AD as has been accomplished for another neurodegenerative disorder, Huntington's disease. Should a specific AD gene be identified and characterized, then there is the potential for the development of therapy based upon correction of the gene defect either by replacement of gene products or by gene substitution.

ALZHEIMER DISEASE RESEARCH

Question. Please bring the committe up to date on what your Insitute is doing in the area of Alzheimer's research.

Answer. The NIA supports a wide range of studies concerned with Alzheimer disease (AD) research. For FY 1986, this amounted to 59 percent of all PHS funding of AD reserch.

The NIA has stimulated and supported a broad spectrum of research aimed at elucidating the etiology, epidemiology, diagnosis, treatment, and eventual cure of AD. Central to this program are the 10 Alzheimer Disease Research Centers (ADRCs), which provide both the scientific expertise and the stimulus for research within their local areas. In addition to advances in the molecular genetics of Alzheimer disease, NIA-supported research has accomplished the following highlights:

- o An apparently abnormal and unique protein has been identified in the neurofibrillary tangles from the brains of AD patients. This protein, known as A68, is detected with a monoclonal antibody called Alz50. Eight of nine diagnosed AD patients have been correctly identified using cerebrospinal fluid within which the A68 appears to be present. This opens the potential for a biomedical diagnostic test for AD.

- o Current diagnoses of AD are based upon neuropsychologic tests and the exclusion of other caused of dementias. The differential diagnosis of AD and other dementias of aging is a key component of NIA's ADRC and Alzheimer Disease Patient Registry (ADPR) programs. Along with the National Institute of Neurological and Communicative Disorders and Stroke (NINCDS) and the National Institute of Mental Health (NIMH), the NIA is taking the lead in organizing an NIH Consensus Conference on the Differential Diagnosis of Dementing Diseases on July 6-8, 1987.

- o A Program Announcement, "The Diagnosis of Alzheimer Disease," will be issued April 3 with the cosponsorship of NINCDS and NIMH.

- o Two Requests for Application (RFAs) are being developed for issuance in FY 1988: Development of Biochemical Markers of Alzheimer Disease; and Validation of Imaging Technologies in Dementing Disorders of Aging.

- o NIA staff have identified several major and interrelated opportunities for the study of dementia

in persons of Asian Ancestry in Japan and the United States. Foremost among these opportunities is the investigation of dementia among Japense-Americans in Hawaii. By the utilization of methods similar to those employed in the Framingham Dementia Study (and other studies), we can investigate the prevalence, incidence, and many of the same correlates and predictors of AD and multi-infarct dementia among these Japense-Americans.

- The Alzheimer Disease Patient Registries (ADPRs) were funded in FY 1986 with the goal of developing and refining diagnostic procedures, criteria and instruments; and of addressing the methodological issues necessary before attempts are made to implement a national registry. To expand and complement the efforts of the ADPRs, Program Announcements have been issued to stimulate work on diagnosis and early detection of Ad and on the development of standardized and validated diagnostic criteria for use in international and cross cultural studies. The NIA has served as a resource to several State agencies interested in establishing state-wide ADPRs.

- Another concern is with the locus of and burden of care of AD victims. The NIA encourages studies on the effects of social and physical enviroments on the manifestations of the disease, medical and social factors associated with caregiving burden, and social and behavioral interventions to help patients, families, and formal care providers cope with and manage AD.

- To further support the dramatic new advances in the molecular genetics of AD, the NIA will develop a cooperative effort to identify families with a high incidence of AD, collect cells from appropriate members of these families, and prepare and distribute to qualified investigators DNA from these cells for use in molecular genetic analysis of this DNA.

- Under the auspices of the NIA Office of Alzheimer Disease Research, an Ad Hoc Interagency Working Group on Alzheimer Disease and Related Dementias is being organized to facilitate communication between operating staff of the relevant Federal agencies.

- The NIA has been cooperating with private foundations, such as the John Douglas French Foundation and the Alzheimer's Disease and Related Dementias Association, in developing and planning workshops, on such topics as "Criteria for Diagnosis of Vascular Dementia" and on "Strategies for Home and Community Care for Alzheimer Disease Patients and Their Families," as well as in developing a major clinical trial to determine the efficacy of tetrahydroaminoacridine in the treatment of AD.

THA CLINICAL TRIAL

Question. A recent report suggests that tetrahydroamino-acridine (THA) may produce some improvement in mental functioning in some persons with Alzheimer disease. What is your institute doing to determine just how effective and safe THA may be for the treatment of Alzheimer disease? What if any role are your Alzheimer Disease Research Centers playing?

Answer. The publication in November by Dr. William Summers of his provocative findings in a small trial on the efficacy of THA in the treatment of Alzheimer disease (AD) has stimulated a great deal of public interest. In order to expedite a larger controlled double blind study, the NIA, in cooperation with the Alzheimer's Disease and Related Dementias Association (ADRDA), is working with the NIA Alzheimer Disease Research Centers (ADRCs) to develop a multicenter trial funded as a supplement to the Mt. Sinai (N.Y.) ADRC. The utilizaiton of the existing well-characterized patient populations within the ADRCs and the resident expertise at these centers permits the rapid enrollment of the appropriate clinical sample and initiation of this important therapeutic trial. The Institute has received the formal proposal. It is anticipated that, pending approval, the award could be made in May. This process was the most expeditious way to meet both the Federal and the public needs for a THA trial. NIA has been working closely with the Food and Drug Administration (FDA) in this process.

The trial will involve approximately 17 research centers and a total of some 300 patients, coordinated by a single investigator working in conjunction with a drug company. If THA proves effective in this larger population of well defined Alzheimer patients, and if it is simultaneously shown to be safe in animal studies, then we are confident that the FDA will expedite introducing the drug to the American market.

It must be remembered that should the efficacy and safety of THA be confirmed, this treatment would be a palliative approach since the underlying process of degeneration of cholinergic neurons is not altered by the anticholinesterase activity of THA. However, the possibility of an extension of normal and productive life of both the AD patient and his/her family may well make THA useful in treatment of AD, should the study confirm its positive effects. The search for other treatments for AD needs to continue as a high national priority.

THE AGING PROCESS

Question. How much of the disease and suffering of our elderly population can be cured and how much is just the natural irreversible consequence of growing old?

Answer. Distinguishing clearly between what is aging and what are diseases in older people continues to be a major research challenge. The former we may not be able to change. We hope we can learn to prevent, modify, or treat the latter. Even though certain changes appear to be inevitable, to be genetically programmed and

inevitable with aging in everyone -- such as a reduction in the competence of the immune system and the end of the reproductive time (menopause) in females -- much recent research has shown that many organ system may in many people maintain remarkably stable functions into very late years, provided they have been spared disease or disuse. These include the heart, the brain, the kidney, the gastrointestinal tract. There is considerable variation from one individual to another and the best information is coming from longitudinal studies, like the NIA Baltimore Longitudinal Study in Aging, in which a person's functions are compared with himself/herself over time.

Thus, we have come to recognize that many impairments of older people are not the normal consequences of aging, but rather previously unrecognized, and potentially treatable deseases. For many diseases, accomplishing these goals may require many additional years of research, but recent findings support the view that it is possible. For example, though we do not yet have a definitive way to prevent osteoporosis, we have learned ways to slow the rate of bone loss. Also, we know that through proper control of high blood pressure, we can markedly reduce the frequency of strokes and multi-infarct dementia, one of the common causes of dementia in older people.

One of the most important issues to be addressed with respect to the interplay between age and disease is identification of the factors that might help to maintain function and independence in older people. Such factors include proper nutrition, exercise and healthy life styles.
Our knowledge of what constitutes the best nutrition in older people is limited, and supporting and conducting research on this topic is a high priority of the NIA extramural amd intramural programs. With regard to exercise, recent studies have shown that, even in previously sedentary older people, a fitness program can result in considerable improvements in aerobic capacity and in blood lipids (fats), and can improve glucose tolerance.

THE OLDEST OLD

Question. The fastest growing population group in Florida and the country is the 85+, often referred to as the frail elderly or the old old. What studies do you plan and/or have underway that address the special needs of this population? Since many of this group are senile or widowed women who often live alone, what research is being done to address the psychological needs of this group as well as the more obvious physiological concerns?

Answer. The oldest old have a very high rate of morbidity and disability, and are heavy users of care. Nationally, almost 25 percent were institutionalized in 1980 (12 per cent in Florida). Of those living in the community, 40-45 percent need the help of another person in order to function in everyday life. Despite the fact that the Federal Government spends well over $50 billion in services and transfer payments to those over age 80, less is known about this age group at all levels than about any other. Too little is known about, for example, the true causes of death in this age group, the reasons underlying the high rates of poverty, the

determinants of physical robustness, or their social and psychological needs.

A Program Announcement on the Oldest Old was issued in 1985 and, within the limits of available resources, a start has been made in redressing our ignorance about this population. Six funded studies focus mainly on the oldest old. These include studies on multiple causes of death, demographic characteristics, how future cohorts will differ from current cohorts, whether the health of this population is changing, the last days of life of the old old, and psychosocial and caregiving issues among the very old. Three additional projects dealing with forecasting the life expectancies, including active and disabled life expectancies for the oldest old, are likely to be funded as a result of an recent Request for Applications. A large project on the social networks and the care of frail elders has just concluded. Although we are developing a better understanding of this population including its social, financial and psychological needs, the process has been slow, and more data and research are needed.

A major barrier to research in this population is still the paucity of reliable and valid national data, especially longitudinal data on transitions from independent to dependant functioning, and on the relationship between economic status and health. Through interagency agreements with Census and the National Center for Health Statistics a start has been made in developing demographic and epidemiological data for scientific research on the oldest old. For example, NIA has funded the Longitudinal Study of Aging to follow-up the 1984 Health Interview Survey old-old respondents as well as a follow-up of the National Nursing Home Study.

MOLECULAR GENETICS AND ALZHEIMER DISEASE

Question. Molecular genetic techniques now provide an opportunity to investigate biological questions which were all but impossible to answer in the recent past. What progress is being made in understanding aging and age-related diseases such as Alzheimer Disease using these techniques?

Answer. The use of techniques of recombinant DNA to study changes in gene structure and expression, and the identification of genes responsible for increased longevity of mutants are promising areas of research in aging. It has now been demonstrated that messenger RNA from senescent cells in culture can be micro-injected into the nuclei of young cells to inhibit further replication of these cells. In current work the cDNA to this RNA will be cloned in an attempt to identify the gene(s) responsible for expression of the "senescence" detected in post-replicative liver cells, indicating that this phenomenon is not limited to cells in culture. In related experiments, a protein called "statin" has been identified in nuclear membranes using monoclonal antibodies specific for senescent cell proteins. The protein is found only in non-replicating cells, and is found both in vivo and in cells in culture. The monoclonal antibody has also been used to identify a putative cDNA clone containing the gene for this protein, suggesting that identification and charaterization of the gene will soon be possible. An important

goal of these experiments is to understand the control of expression of genes for these senescence-related proteins.

The amino acid sequence of a protein found in the amyloid plaques in brains of patients who died with Alzheimer disease has been sequenced. This protein is also found in the brains of people born with Down syndrome. Using this sequence several research groups have constructed molecular probes to use to search the human genome for the gene responsible for this protein. This gene has now been identified and chromosome mapping has begun. The gene lies somewhere near the middle of human chromosome 21, which is a very interesting finding because people with Down's syndrome have an extra copy of a particular region of chromosome 21, and this region may contain this amyloid gene. The gene has yet to be accurately mapped and completely sequenced. An understanding of the role of this gene in Alzheimer disease could provide insights into both the cause and treatment of this disease. This area of research needs to be expanded because it is likely that more than one gene may be involved in the etiology of this disease.

Another recent discovery is that there is a genetic defect predisposing individuals to Alzheimer disease located on chromosome 21. This same defect has been detected in four distinct families afflicted with a high incidence of this disease. A major question remaining to be solved using molecular genetic techniques is whether this gene is indeed identical to the gene for the amyloid protein.

The new Laboratory of Molecular Genetics at the GRC has several promising areas of research, including an examination of expression of certain crucial immunological genes during aging, isolation of genes responsible for inhibition of cellular proliferation ("in vitro senescence"), and a search for genes whose expression changes significantly with aging.

Question. What more can be done?

Answer. In the area of Alzheimer disease, the amyloid gene needs to be mapped to an exact location on chromosome 21 in order to determine whether it coincides with either the chromosome region amplified in Down's syndrome or the genetic defect predisposing individuals to familial Alzheimer disease. It is currently known only that this genetic defect is not in the region amplified in Down's syndrome. The entire sequence of the amyloid gene must be determined, including the sequence of the control regions of the gene. The knowledge of these sequences will be important in understanding the control of expression of this gene in Alzheimer disease and Down's syndrome.

The genetic defect in familial Alzheimer disease also needs to be mapped to a specific location on chromosome 21, and the corresponding gene product must be identified. Of course, it may turn out to be the amyloid protein. If it is not, then the gene must be sequenced to understand the nature of the gene product and how its expression is controlled.

We also a need to identify more large families predisposed to Alzheimer disease. Whereas the four families examined so far appear

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to have the same or very similar defect, Alzheimer disease appears to be a very complex disease and could have many causes. Therefore, more epidemiological work is needed to identify these families, and representative cells must be obtained, banked and made available to the research community for further molecular genetic research of the kind described above.

OSTEOPOROSIS AND FALLS

Question. In your testimony you have noted that both osteoporosis and falls are major causes of hip fractures and other disabilities among older people. What progress have we seen on these problem? What has been the response to your initiatives such as the Programs of Excellence in Research on Osteoporosis in which you are collaborating with NIAMS and NIDDK?

Answer. Research supported by NIA and others has led to more effective treatments for rapid bone loss, especially from the spine, in women in the years immediately after menopause. This is heartening, and should lead to fewer painful and disfiguring vertebral fractures. However, to prevent hip fractures and their accompanying morbidity, mortality, and enormous health care costs, we need to learn how to prevent the decline in bone strength in the hips of persons over the age of 65. Loss of hip bone strength is a key antecedent in the majority of hip fractures. We do not fully understand the reasons for the continuing bone loss in the later years, but they involve more than the menopause. This is shown by high rates of osteoporosis in men over the age of eighty. While we do not yet know the best way to prevent this loss, some NIA-supported research suggests that specific nutritional and exercise strategies may be effective.

Clinical research on aging has developed so that researchers now have the interest and expertise to study osteoporosis at advanced ages when it is most damaging. The "Programs of Excellence in Research on Osteoporosis," launched last year by NIA in conjunction with NIAMS and NIDDK, are an excellent means of supporting this effort. This initiative will support the best possible teams of researchers on osteoporosis at medical centers throughout the U.S. Twelve proposals have been submitted, most from leading bone research centers. Three grants will be awarded in FY 1987. The NIA plans to support at least one additional "Program of Excellence" in FY 1988, and possibly additional smaller research grants on this problem.

Results from our program on falls have reinforced our belief that falls are not an inevitable consequence of old age, but are caused by problems which are potentially treatable and/or preventable. Researchers at Albert Einstein College of Medicine in New York have found that many older persons prone to falls have dramatically less strength in some leg muscles than persons of similar age who do not tend to fall. Many also have neurologic abnormalities detectable by CT scans. Further research should lead to better ways of identifying persons at high risk of falling, understanding the causes of their neuromuscular problems, and practical ways of preventing falls, such as exercises to strengthen key muscle groups needed for balance. NIA's request for

applications to study the causes of falls in the elderly has stimulated interest from researchers in orthopedics, gait laboratories, neurophysiology, and other disciplines who could help solve this problem. We are now seeing more strong grant applications in this field, and will expand this program as appropriate.

NUTRITION

Question: You have emphasized the need to know more about nutritional requirements of older persons. What efforts are needed to obtain this knowledge? What can NIA do, both by itself and in conjunction with other agencies, to further these efforts?

Answer: Determining nutritional requirements of older persons is a difficult and complex job. There are many nutrients to consider, and the nutritional requirements of older people are affected by a variety of diseases, medications, and other factors. The most appropriate approach to nutrition research would be to study the needs for each nutrient in detail, including the effect of chronic diseases, interactions with other nutrients, and other factors. To this end, we have initiated a series of research planning conferences. Each will identify needs for research on a particular topic as a basis for a subsequent NIA solicitation for research projects. These conferences will begin in FY 1987, and funding for the research solicitations will begin in FY 1988. Research issues to be addressed include optimal caloric intake and body weight, the role of B vitamins in preventing neurologic diseases of old age, effects of dietary calcium on bone density in older persons, and many others.

NIA has also collaborated with the National Center for Health Statistics (NCHS) in identifying important information which could be collected in the third Health and Nutrition Examination Survey (HANES III). This will provide a unique opportunity to learn how the diets of older people are related to their health and risks for diseases, and will be the first HANES survey to gather data on persons over the age of 74. This project would be a very economical way to get this information as it would obviate the need for a comparable separate nutritional survey of older people.

COMPARATIVE STUDIES

Question: We understand that promising scientific opportunities exist for comparative studies across cultures and among ethnic groups, which will advance our understanding of causes and potential prevention or treatment of conditions affecting older people such as dementia and osteoporosis. What progress is your Institute making in developing international, cross-cultural studies?

Answer: The National Institute on Aging will play a major role in the recently endorsed World Health Organization's (WHO) Coordinated Research Program on Aging, including establishment of a collaborating center at NIA for coordinating international data. Four high priority areas have been identified for cross-national initiatives. The NIA, with WHO, will establish scientific working

groups in: 1) epidemiological and social survey research, 2) dementias of old age 3) nutrition in the elderly, and 4) immunological and neurobiological aging research.

As directed by Congress, the NIA is cooperating with the Agency for International Development in developing plans to support studies in other countries. The Bureau of the Census, funded by NIA, has assembled an international database on older people. The two agencies plan to sponsor expansion of this database including data on the rapidity and causes of population aging and the effects of aging in additional countries.

In collaboration with WHO Division of Non-Communicable Diseases, NIA has identified a set of low cost-high yield opportunities to study chronic disease in Framingham-like studies in European countries with very different risk factor patterns. Some such as the North Karelia Study in Finland, have over 20 years of data on subjects, many of whom are over age 85. There are also opportunities to extend the U.N. Household surveys of disability to older populations.

Discussions are underway between NIA and Italy and Israel about the sponsoring of joint meeting and workshops in which diagnosis and methodological issues in research on Alzheimer disease would be major topics. Opportunities also exist for cross-cultural studies of aging-related diseases among minority cultures of the Pacific Basin.

TRAINING

Question: We understand that a recent Institute of Medicine study on the needs for geriatric leadership is recommending that comprehensive geriatric research training centers be established. What are your views of such a recommendation?

Answer: The National Institute on Aging strongly endorses the Institute of Medicine recommendation for establishment of Comprehensive Research and Training Centers. Experience with training leaders in other medical specialties shows this to be the most successful model for attracting the highest quality candidates who later assume teaching and leadership roles. Components of training centers must include both basic science and applied research in aging and postdoctoral training of physicians in research and patient care.

Question. In 1984, the DHHS presented Congress with its Report of the Health and Human Services Task Force on Geriatrics and Gerontology. Has the NIA been successfully able to respond to various recommendations contained in that report?

Answer. The recommendations of the 1984 Report to Congress on Education and Training in Geriatrics and Gerontology called for action by various public and private groups at the national, state, and local levels. In line with the Report's recommendations, the NIA has been able to provide increased support for research training.

Additional NIA funds have been used to support two new training programs: The Complementary Research Training Grants are designed for existing, well established research training programs in various disciplines related to aging (i.e. neurosciences, clinical pharmacology, cell biology cognitive psychology, sociology, and various disease-oriented areas) with potential for preparing more investigators for research on aging. Thus far, NIA has funded seven such grants. Similarly, in responding to the Report's concern about the need for more investigators prepared for research in the biomedical and behavioral sciences, the Cofunding of Research Training Slots of other NIH research training grants has been accomplished. Since 1985, NIA funded 31 such slots in addition to the regular institutional research training grants supported by NIA.

Additional funds have also been used to enhance existing training programs. For the preparation of more physicians as clinical investigators, NIA has funded six new Physician Scientist Awards since FY 1984 which provide for up to five years of special study in the basic sciences. Also since FY 1984, six new Geriatric Leadership Academic Award grants have been funded. These respond to the Report's emphasis that information on the aging process and the elderly should be incorporated throughout health professions curricula and clinical experiences, and that research on aging should be encouraged and enhanced in the many relevant disciplines and fields.

To develop and make available information on the status and effectiveness of education and training activities in geriatrics and gerontology, the Institute is now equipped with a framework for staff to develop a data file of recipients of research support from NIA. This file can also be expanded to include individuals who received research training related to aging from other BIDs at NIH, NIMH, HRSA, and other agencies.

More recently, Section 8 of PL 99-158 called for a study of personnel and training needs for the health care of older persons through the year 2020. The study addresses a wide range of personnel (from medical, dental, and nursing, to social workers, physician therapists and community health service providers) and their training needs, as well as necessary changes in Medicare and other third party reimbursement programs to support training of primary care physicians, other physicians and other personnel in the care of the elderly. The NIA is co-chairing the HHS Committee on Personnel for Health Needs of the Elderly which is currently completing the report about this study for Congress.

CLINICAL TRIAL ON SYSTOLIC HYPERTENSION

Question. How far are you into the five-year clinical trial on hypertension, "Big SHEP?" What findings have been made thus far -- particularly as they relate to dementia patients?

Answer: To determine the feasibility, benefits, and possible deleterious effects of lowering blood pressure in older patients with isolated systolic hypertension (ISH), a double-blind pilot study was conducted on 500 patients, randomized into treatment and placebo groups. The major findings of the pilot study indicated the

feasibility and relative safety of conducting a full-scale trail, which was begun in the fall of 1984 as a joint effort of the National Heart, Lung, and Blood institute (NHLBI). At present there are 16 participating centers. The overall goal is to recruit and randomize 5,000 patients. It is anticipated that to achieve this goal it will be necessary to screen approximately 250,000 people over age 60.

At present, the full scale trial is proceeding well. Patient recruitment began in March 1985 and will end in September 1987. As of September 20, 1986, a total of 2,864 patients had been recruited and randomized. Calculations of statistical power indicate that to detect differences in the endpoints between the treatment and control groups, 4,900 patients must be recruited. It is anticipated that the treatment phase of the trial will close in FY 1990.

CLINICAL TRIAL ON ESTROGEN THERAPY

Question. When do you expect to have underway the major clinical trial on estrogen therapy as a preventive for osteoporosis? How long will the trial last?

Answer. Our current plan is to support a study of the effects of estrogen replacement on risks for osteoporosis as well as cardiovascular disease. This study is being jointly supported by five NIH Institutes, including NIA. Our reason for this approach is that postmenopausal estrogen replacement affects the risks for several diseases, and may significantly reduce the risk for cardiovascular disease. Hence it makes sense to study the effects of estrogen replacement on the risks for a variety of diseases, not just osteoporosis. This study will begin in FY 1987 and will last five years.

MIGRATORY PATTERNS OF OLDER PEOPLE

Question. I am interested in your behavioral sciences research estimate that "the average person reaching age 60 in any of the New England or Northern states will spend more than 20 percent of his or her remaining lifetime in Florida." Have you also done studies on the effect of migratory patterns of the elderly on traditional family care-giving relationships -- especially as the elderly parent or spouse grows older and more frail?

Answer. Studies on the migration of older individuals have focused on describing and understanding the patterns of retirement migration in terms of the flows between states and their state level determinants. While most of the research has focused on migration at the age of retirement, results from a large scale study completed some years ago illuminated another migratory phenomenon -- known as return-migration.

In return-migration, older people return to their state of birth. These return migrants are often in their eighties and are more likely to be widowed. The investigator inferred that these are likely to be people who migrated to, for example, Florida after retirement and then returned to their state of birth to be near to

their children after they became widowed or too frail to live on their own. Little else, however, is known about these return-migrants whose numbers are likely to be underestimated if, for example, their children or other close supports do not live in their home state. We currently have little understanding of either the impact of migration on local areas in terms of increased demands for health and other care services, or on the impact on traditional care giving relationships.

We hope that a special migration study as well as follow-up studies based on such surveys as the NCHS Longitudinal Study on Aging (LSOA), Census's Survey on Income and Program Participation, and the Retirement History Survey might help identify and describe this important group. The LSOA, which follows the older respondents from the 1984 National Health Interview Survey's Supplement on Aging, specifically requests the reasons for any change in physical functioning, residence or living arrangement. We also hope to encourage research studies on the LSOA and the National Long Term Care Study to investigate the dynamic interrelationships between local and distant migration, changes in health and functioning, geographic proximity of kin, housing, and living arrangement patterns.

NIA is sponsoring a session on the impact of migration at the July 1987 Public Health Service Conference on Records and Statistics which will consider the need for new data bases to answer these questions as well as the need for a program announcement to focus researcher attention on these questions.

FOREIGN SCIENTISTS

Question. Through the activities of the Fogarty International Center, NIH is able to take advantage of the research expertise of more than 1,950 scientists from about 65 countries. Should these foreign scientists be counted as part of the NIH personnel ceiling? If not, why not?

Answer. The number given, i.e., 1950, includes all categories of foreign scientists coming to the NIH during FY 1986, a number somewhat greater than if the count were taken at any specific point of time. Visiting Fellows are not included in the personnel ceiling; these are young scientists who have 3 years or less of postdoctoral experience and come to the NIH for practical research training in their chosen fields. Foreign Guest Researchers also are not included as part of the personnel ceiling; they are individuals invited to come to the NIH at their own expense. Individuals appointed under the Visiting Associate, Visiting Scientist, and Special Expert categories (approximately 500 in FY 1986) perform services for the NIH and, appropriately, are considered employees and therefore are part of the personnel ceiling.

Question. How many U.S. scientists do we have overseas as part of this program? What has been the difficulty in placing more U.S. scientists abroad?

Answer. Under programs supported by the NIH, 85 U.S. scientists conducted research in other countries during FY 1986. This number represents 40 Fogarty International Center Senior International Fellows, 6 exchange scientists, 25 National Research Service

Awardees, and 14 other exchange and NIH work-study program participants. Although there is little difficulty placing U.S. scientists abroad, we need to ensure that U.S. scientists are aware of such opportunities and that we are encouraging them to take advantage of such programs.

AIDS

Question. I note that with the exception of a conference on AIDS, there is no mention in your budget justification of programs supporting research on this important international health problem. Is the Fogarty International Center planning to support any programs on AIDS this year or in the near future?

Answer. Beginning in FY 1988, the Fogarty International Center is establishing a Special International Fellowship Program in AIDS for basic and clinical research in any biomedical discipline related to AIDS. These 5-year awards will be made to, and administered by, domestic institutions with demonstrated expertise in AIDS research to support both U.S. and foreign scientists for periods of from 3 to 24 months. Opportunities will be provided for foreign scientists to work in the U.S. grantee institution as well as for U.S. scientists to visit foreign sites to initiate new projects or to oversee ongoing collaborative efforts. Two awards will be made in FY 1988 by reprogramming funds from existing activities. We expect that program expansion in FY 1989 will provide for four awards. Costs are estimated at $400,000 in 1988; the expansion to four new awards in FY 1989 will cost an additional $800,000. This award is unlike other NIH awards and is unique among all AIDS initiatives in that it focuses solely on the development of biomedical science researchers devoted to research on AIDS.

FIC PROGRAM EXPANSION AND INITIATIVES

Question. We note that the Fogarty International Center's budget has been virtually level for the past several years. Does this mean you are satisfied with your current program efforts?

Answer. Although the FIC has been functioning well under recent appropriation levels, we have several priorities for expansion of current programs and support of new initiatives:

- Conversion of the International Research Fellowship Award to a 2-year award. This program has made 1-year fellowship awards, with the ability to grant only an average 3-month extension. A 2-year award would enable scientists to conduct more in-depth research.

- As indicated above, we are initiating the Special International Fellowship Program in AIDS by reprogramming $400,000 in FY 1988 to make two awards.

- Initiation of a program that would provide opportunities for outstanding senior foreign scientists to conduct collaborative research with colleagues at U.S. institutions.

- o Increase in the Scholars-in-Residence Awards to provide more opportunities for scientists at the Nobel laureate level to bring a new perspective to pursue research at the NIH.

- o Increase the number of awards available to U.S. scientists under the Senior International Fellowship Program above the recent level of 35 to 40.

U.S. SCIENTISTS WORKING ABROAD

Question. Obviously, the National Institutes of Health is on the forefront of biomedical research in many subject areas. However, I have a perception that medical research laboratories in other countries may be doing highly sophisticated work from which we stand to derive some benefit. Do you feel there are enough opportunities available to American scientists to enable them to work abroad?

Answer. Opportunities for U.S. scientists to work abroad do exist, such as the FIC Senior International Fellowships, but these opportunities need to be increased and new initiatives established. For example, the Senior International Fellowships have been in existence for the past 12 years, but we are able to fund only 35 to 40 awards each year. We have many worthy unfunded applications.

We are initiating the Special International Fellowship Program in AIDS, that will enable both U.S. scientists to go abroad to participate in new collaborative AIDS research efforts and foreign scientists to come to U.S. institutions to assist in ongoing AIDS research programs.

As indicated above, a program that provides opportunities for junior U.S. scientists to conduct research in other countries is also needed.

We are also working with medical research councils and other scientific organizations to pave the way for greater access by U.S. scientists to foreign laboratories where advances there can be brought back to the benefit of U.S. science and the health of American citizens.

SYMPOSIUM ON RABIES

Question. One of the stated goals of the FIC-sponsored symposium on rabies held in November 1986, was to assess current treatment and prevention strategies for the disease. What conclusions were drawn from the study relative to our ability to control rabies?

Answer. There is a huge reservoir of rabies virus in wildlife populations. In developing countries, the problem is extended to domesticated animals as well. The FIC symposium on rabies determined that human rabies can be prevented and is eradicable if wildlife are well immunized globally. In animals, rabies occurs in a cyclical pattern and, if not controlled, could result in transmission to the human population via domesticated animals, causing serious epidemics. Existing vaccines, using oral bait with attenuated rabies virus, can be used to prevent rabies outbreaks in animals at highest risk, such as raccoons, skunks, bats, foxes. Further, research is needed on

new vaccines to protect animals and humans against certain newly identified strains of the virus.

The standard treatment of rabies in developed countries is via rabies immunoglobulin and human diploid cell vaccines. In the developing world, Pasteur's nerve-tissue vaccines are still used, but they have neurological side effects and are of questionable efficacy. Research is also needed to develop inexpensive, effective treatments without side effects that can be administered by personnel with limited training.

REGULATION OF BONE MINERALIZATION

Question. Reference is made in the FIC budget justification (p. 405) to studies conducted by a Scholar-in-Residence on regulation of bone mineralization. Do the findings of this study have any obvious near-term application to the treatment or prevention of osteoporosis in the elderly in this country?

Answer. Osteoporosis is a disease, highly prevalent in elderly women, in which bone mass is lost. Early diagnosis is difficult because present methods using radiological techniques are imprecise or expensive, requiring advanced techniques such as CAT-scanning. The study conducted by the Fogarty Scholar, in collaboration with several NIH intramural scientists, resulted in the development of a radioimmunoassay for osteonectin, a bone protein that can be used as a marker for estimating loss of bone mass during aging. This assay should be of value in diagnosing the disease at a younger age, making preventive measures such as calcium fortification of the diet and exercise more effective.

Questions Submitted by Senator William Proxmire

DIET AND HEART DISEASE

Question. There appears to be some possibility of reducing the risk of stroke and coronary heart disease by dietary management. Can you elaborate on the scientific validity of these reports and on any research supported by the National Heart, Lung, and Blood Institute (NHLBI) in this area?

Answer. The major risk factors for coronary heart disease (CHD) are high blood pressure, high blood cholesterol, and smoking. High blood pressure is also a major contributor to stroke. Obesity is frequently associated with high blood pressure and high blood cholesterol. It has been found to increase the risk of developing CHD even in the absence of high blood pressure and high blood cholesterol. High blood pressure, high blood cholesterol and obesity are all amenable to treatment and prevention by diet. Weight reduction, alcohol reduction and sodium restriction have also been found to reduce the need for antihypertensive medications.

Reducing excess weight and restricting saturated fat and dietary cholesterol, together with moderate increments in polyunsaturated fats, have been repeatedly shown to lower blood cholesterol. Drug-induced lowering of plasma cholesterol in high

risk men in the Lipid Research Clinics Coronary Primary Prevention Trial (LRC-CPPT) caused a significant reduction in coronary heart disease of about 2% for every 1% of cholesterol reduction. It has been estimated that diet-induced cholesterol lowering could reduce CHD risk by about 1.5% for each 1% cholesterol lowering.

The Institute supports a broad research program on the relationship of dietary factors to CHD risk. Other research efforts seek effective approaches to dietary modification and prevention programs at patient, worksite, school and community levels.

Question. Recent reports on the potential health effects of consumption of omega-3 polyunsaturated fatty acids found in certain fish and fish oils have stimulated considerable scientific and public interest. Would you please briefly explain the effect of fish oil on heart and vascular diseases, and what role the NHLBI plays in that area.

Answer. Preliminary information from biochemical and clinical investigations suggest that fish and fish oils may be linked to changes observed in platelet function, in blood pressure, and in cell-mediated immunity. These oils may also be useful in the treatment of peripheral vascular disease. Fish oils, unlike vegetable oils, reduce plasma triglyceride levels. Thus, they are beneficial in treatment of hypertriglyceridemia. However, data are inconsistent regarding the effect of fish oils on cholesterol-rich low density lipoproteins (LDL), the so-called atherogenic lipoproteins and high density lipoprotein (HDL), the antiatherogenic lipoprotein. Research has not yet elucidated the mechanisms involved or provided evidence for the potential beneficial or deleterious effects of dietary fish or fish oils in humans.

The Institute is presently supporting about $1.0 million in fish oil related research. It has recently received and reviewed 38 research applications in response to a Request For Applications (RFA) to support research designed to elucidate the basis for the effect of omega-3 fatty acids on processes that may be involved in heart and vascular diseases. These applications will be funded this year.

Question. Dr. Lenfant, we often hear about cholesterol and heart disease. What is the role of dietary cholesterol in human health and nutrition?

Answer. Cholesterol has many important roles in normal body function. It is derived from the diet and is also manufactured by most of the body's cells. However, blood cholesterol is a major risk and causal factor in the instigation, development, and progression of coronary heart disease (CHD). The greater the blood cholesterol concentration, the higher the risk for CHD. Lowering the blood cholesterol by dietary or pharmacologic means has been shown to reduce this risk.

Dietary cholesterol can influence atherosclerosis in one of two ways. In the first place dietary cholesterol contributes to raising blood cholesterol levels in most people; in many, there is a small or modest response. Dietary cholesterol might also affect

the development of atherosclerosis by influencing the composition, concentration, and metabolism of certain blood fat particles, called lipoproteins. Whatever the mechanism, there is little doubt that in many people, dietary cholesterol has an independent effect on blood lipids.

Question. I heard about the development of new drugs to lower blood cholesterol. I am told that these drugs are very effective. Does it mean that the patients will no longer have to be careful about their diets?

Answer. A new class of drugs so-called HMG-CoA reductase inhibitors, are proving to be very effective in reducing cholesterol. It is likely that one of these, lovastatin, will be approved by the Food and Drug Administration (FDA) shortly. Safety tests on these drugs have so far produced essentially reassuring findings, but much more information is needed regarding their long-term safety.

Although patients may be tempted to disregard dietary treatment, exclusive reliance on such drugs is undesirable. Many patients do well on diet alone and do not need to expose themselves to the possible risk and expense of a drug. The combination of drug and diet is a more effective cholesterol-lowering measure than the use of any one of them alone. The concomitant use of diet may allow smaller and possibly safer doses of the drug to be used in some patients. In general, cholesterol-lowering drug therapy should only be considered in individuals with unusually high cholesterol levels in whom diet treatment has proved insufficient.

Question. Dr. Lenfant, the NHLBI is encouraging the public to learn their cholesterol levels. Is this having an impact upon the public?

Answer. Yes, according to national surveys sponsored by the National Heart, Lung, and Blood Institute in 1983 and 1986, American adults are more aware of their cholesterol levels and more people are making efforts to control their level of blood cholesterol. In 1983, 35% of those surveyed said they had their cholesterol checked. This number increased to 46% in 1986. During the same period, the number of adults who reported making diet changes in an effort to lower blood cholesterol increased from 14% to 23%.

Questions Submitted by Senator Dale Bumpers

STUDIES OF LEFT VENTRICULAR DYSFUNCTION CONTRACT

Question. We have met and corresponded in the past regarding the termination of the Studies of Left Ventricular Dysfunction contract held by the University of Arkansas for Medical Sciences (UAMS). On January 8, 1987, you provided information regarding contracts held by 23 medical centers that are participating in this study. You stated at that time that NIH is proceeding with the modification of SOLVD contracts with participating clinics that are exceeding their recruitment goals. Could you bring me up to

date on the enrollment of patients at the participating clinics and the modification of contracts.

Answer. I am pleased to provide you with updated recruitment figures for each of the participating centers as of March 12, 1987:

SOLVD CLINICAL CENTERS

Centers	Number of Patients Initially Agreed Upon	Patients Enrolled as of 3/12/87
University of Alabama	400	81
Albert Einstein College of Medicine	360	34
Baylor College of Medicine	270	60
Catholic University of Louvain	300	120
Dalhousie University	312	74
University of Florida	255	75
Hahnemann University	342	20
University of Illinois	390	75
University of Medicine and Dentistry of New Jersey	360	68
Michigan State University	270	60
University of Michigan	330	88
University of Minnesota	375	50
Montreal Heart Institute	300	60
New England Medical Center	337	59
New York Medical College	255	59
Oregon Health Sciences University	300	50
Overlook Hospital	255	33
State University of New York, Buffalo	300	35
Rhode Island Hospital	339	47
University of Rochester	260	50
Vanderbilt University	255	50
West Roxbury VA Hospital	260	49
University of Washington	330	45

We are currently negotiating with all the participating centers for the next increment of performance. As part of this process, we are increasing the recruitment goals of seven of the twenty-three centers.

Question. Are all SOLVD centers increasing their recruitment goals?

Answer. No, not all SOLVD centers are increasing their recruitment goals. Goals are being increased for those centers that have already demonstrated high recruitment levels above their present contractual commitment.

Question. Would you compare the per patient cost of the final cost proposal submitted by UAMS on June 23, 1986, and the per patient costs of the other 23 centers? Aren't the per patient costs of the UAMS proposal in line with the costs of the other centers?

Answer. The per patient cost of the final UAMS cost proposal dated June 23, 1986, was $3,153, compared with the average per patient cost of $3,060 for the other centers. Based on this information, I would say that the per patient costs of the June 23, 1986, UAMS proposal are in line with the average per patient costs of the other centers.

Question. If you assumed that UAMS could enroll 295 patients at the cost submitted on June 23, 1986, and within 12 months could make up any time lost because they have been out of the project, what reason would there be to deny a SOLVD contract to UAMS.

Answer. The decision to terminate the contract with UAMS was based primarily on two factors: the fact that the proposal had been significantly revised so that there were substantial differences from the original, peer reviewed proposal; and that UAMS was unable to demonstrate a viable plan to recruit 295 patients at the cost submitted. Furthermore, the concern would seem even greater now should they try to recruit within 24 months the numbers of patients needed to catch up to the numbers recruited by the other centers in a 36 month period.

As you know from our previous discussions and correspondence, we were at a very critical decision point in this clinical trial. Once patients are recruited into a trial, there is a moral obligation to continue following them as outlined in the protocol. If there is doubt about a contractor's ability to recruit sufficient numbers of patients to be cost effective, then we must look carefully at whether we want to commit that contractor to the recruitment and follow-up phases of the trial, i.e., a commitment for up to five and a half years.

Our discussions with UAMS spanned three and a half months and provided many opportunities for the University to provide information that would convince us of its chances for successful recruitment. The Institute had to make a decision. Because UAMS had not provided what we considered a workable management plan, we had no basis to assume their ability to succeed in enrolling 295 patients. This was complicated by doubts on our part that the costs proposed were realistic. We made a difficult, but I believe, a correct decision to terminate the UAMS contract in the government's best interest.

Questions Submitted by Senator Mark O. Hatfield

THA CLINICAL TRIALS

Question. Last November, the New England Journal of Medicine reported on tests of an oral drug, called THA, in the treatment of Alzheimer's patients. The tests were very limited in scope but appeared somewhat encouraging. Have you made plans for replicating the tests on a wider scale?

Answer. In order to initiate a larger controlled double blind study of tetrahydroaminoacridine (THA) as quickly as possible, the NIA, in cooperation with the Alzheimer's Disease and Related Dementias Association, is working with the Alzheimer Disease Research Centers (ADRCs) to develop a multicenter trial. The

Institute has received a formal proposal as a supplement to the Mt. Sinai (NY) ADRC and will expedite its scientific review. Pending approvals, the award could be made in May or June.

Should the efficacy and safety of THA be confirmed, it is important to understand that this treatment would be pallitive only. The underlying process of degeneration of cholinergic neurons would not be altered by the anticholinesterase activity of THA. However, the possibility of an extension of normal and productive life of both the AD patient and his/her family may well make THA useful in the treatment of AD, should the study confirm its positive effects. The search for other treatments of AD needs to continue as a high national priority.

Question. Obviously, there is great interest in learning whether in fact THA offers real hope. How long would the trials need to run before there would be some definitive answers?

Answer. The trial is planned for two years with a recruitment of 300 patients. Based upon statistical considerations, this sample size should be able to detect a minimal meaningful effect if at least 25% of drug-treated and no more than 10% of the placebo-treated patients have positive responses. However, after the first 100 patients have been evaluated, within the first year of the study, an interim analysis will be conducted to establish efficacy.

Question. How quickly could you begin testing?

Answer. The clinical trial can be initiated rapidly due to the availability of the centers and their patient populations. Since the publication of the paper by Dr. William Summers in the November 13, 1986 issue of The New England Journal of Medicine, the ADRCs, the National Institute on Aging, the Food and Drug Administration, and the Alzheimer's Disease and Related Disorders Association have been working closely to develop and expedite a well controlled multicenter trial with funding potentially available, pending successful scientific review, by June 1, 1987. This is an interval of less than seven months, indicating that with the cooperation of the various groups and Agencies, the Federal Government can be responsive to the needs of the public.

Question. What would the testing cost and do you have the resources you need to get started, or would you have to divert funds from other research activities?

Answer. The two year study will cost about $2 million with $750,000 in FY 1987 and $1.25 million in FY 1988. Under our current budget, these funds will have to be reprogrammed from lower priority areas.

Question. Would you utilize the 10 existing Alzheimer's Centers as the test sites for testing the THA drug?

Answer. The ADRCs will play a central role since they have developed populations of well diagnosed and characterized patients and healthy aged controls. Furthermore, investigators associated with these centers are the nation's leaders in the diagnosis of AD. Nine of the ten centers have agreed to participate in the THA trial.

An additional eight clinical research groups around the country will cooperate in this multicenter trial.

Question. In general, have we reached the point where we should consider expanding the number of research centers beyond the 10 already established?

Answer. Additional ADRCs would allow more rapid exploitation of promising opportunities now available in the field of Alzheimer disease research. There are more qualified research settings in this country which could become ADRCs. Up to five new centers could be justified on the basis of scientific skills available and need for geographical distribution. It is vital, however, that the funding of the present ten ADRCs not be compromised by the addition of other centers.

Questions Submitted by Senator Lowell P. Weicker, Jr.

BUDGET DATA

Question. Does your budget request include out-year funds to level fund research project grants?

Answer. The total budget request for the National Cancer Institute (NCI) is $1,811,117,000 and includes a total of $508,294,000 which is intended to cover the future year costs of the 1,034 competing research project grants proposed for funding in the FY 1988 request.

Question. What is your request without those funds?

Answer. The budget request for NCI includes $1,366,935,000, including funds carried over from 1987.

Question. How much is cut in FY 1987 as part of your FY 1988 request?

Answer. The FY 1988 budget request includes a proposal to carry $64,112,000 in budget authority forward from FY 1987 to offset some costs of research project grants in FY 1988.

Question. What was your By-Pass budget request for FY 1988?

Answer. The FY 1988 By-Pass request of $1.7 billion includes the following funding highlights: 45 percent of approved research project grants would be funded at recommended levels; five to ten additional cancer centers would be funded at recommended levels; a 50 percent increase over the current level of support would be provided for prevention and control activities; 1,600 trainees would be supported through the National Research Service Award program; $35 million would be made available in construction funds; NCI would have an FTE level of 2,500; an additional $30 million would be provided for increased support for AIDS research; $10 million would be available to meet the extramural community's needs for scientific instrumentation; and $50 million would be provided in support of a Special Initiative to begin a coordinated program for mapping and sequencing the human genome. A request for two year obligating

authority for both the Special Initiative and construction funds also was included in the By-Pass Budget request for FY 1988.

DEVELOPMENTS IN RESEARCH

Question. Dr. DeVita, over the last few years you have reported on significant advances in cancer research. Last year you said that scientists had reached a new understanding of what the cancer cell really is at a molecular level. You have also discussed the new insight scientists have gained into how normal, healthy cells can be transformed into cancer by what are known as "oncogenes." What updates can you give use on any new developments since last year?

Answer. The discovery and study of viral oncogenes and their normal cellular counterparts, proto-oncogenes, have suggested innovative approaches to cancer prevention. One such approach, which is already beginning to be applied clinically, is the detection of oncogene sequences or their products, to aid in the early diagnosis of cancer. The newly discovered met oncogene has structural similarities to growth factor receptors, and is active as a tyrosine kinase enzyme in many human cancer cell lines. Probes from the met oncogene locus were shown to be tightly linked to the gene for the genetic disease cystic fibrosis, thus providing a prenatal diagnostic tool which is currently in use throughout the world.

The proto-ets oncogene probes may prove of value to investigations of both the consequences of specific human leukemias, and also in studying genetic pathologies in closely situated and possibly linked chromosomal regions. The proto-ets oncogene and the proto-c-myc oncogene in humans have been shown to be located at critical sites on human chromosomes and are involved in known chromosomal aberrations associated with two human cancers, acute myeloid leukemia and Burkitt's lymphoma, respectively. Investigations on the human ets gene have mapped it to the human chromosome 21 and have led to the realization that this gene may have valuable application to other human conditions. The normal cellular counterpart, proto-ets, is located precisely in a region that appears to be involved in the Down's syndrome phenotype. Current studies are seeking to further define the relationship the ets gene product to Down's syndrome. Additionally, Alzheimer's disease has also been mapped to this same chromosomal region and could also be studied using ets gene probes.

A new area of oncogene-related research is beginning which may define an entirely different set of genes. To date, scientists are actively studying the oncogenes involved in growth control. However, there are likely to be other genes involved in invasion and metastasis, the processes which contribute most significantly to cancer deaths. Clearly, invasion and metastasis reflect aberrations in genes that normally control cell movements and cell interactions. Isolating and defining the biological activities of these genes is at an early stage of development, and is sure to provide further information important to diagnosis, treatment and secondary prevention.

A new class of transforming genes has been implied from other

kinds of genetic studies. It is clear that in a number of inheritable cancers such as retinoblastoma and Wilm's tumor that cancer is induced when certain genes are not expressed. These genes have been termed anti-oncogenes or suppressor genes and appear to exert their control over growth processes by somehow inhibiting or suppressing cell growth as opposed to positively acting oncogenes which stimulate or induce cell growth. Anti-oncogenes produce cancerous growth by virtue of their absence or inactivity. This is an entirely new field of investigation which may provide a whole new dimension of understanding about how cells intricately balance positive and negative controls to regulate growth processes. A major result obtained this year is the possible isolation of the gene which is missing in retinoblastoma patients. We may be on the verge of getting our first opportunity to study an anti-oncogene.

One of the most exciting new areas of oncogene research is the use of transgenic mice as model systems for understanding the cancer process. It is now possible to create DNA constructs that combine the DNA sequences responsible for controlling tissue-specific expression with the DNA sequences that code for oncogene protein products. By microinjecting these DNA molecules into fertilized mouse eggs, some of the mice which develop will contain the desired construct in every cell of the fully developed animal. However, by using different tissue-specific controlling sequences, it is feasible to study the effects of every oncogene or combinations of oncogenes on cancer development in all anatomical locations. While these experiments are at the forefront of using genetic engineering to create mice with new heritable properties, they offer an exquisite degree of control of gene expression in animals and a limitless potential for studying the effects of oncogenes under normal physiological conditions, experimental situations which have not been possible in the past.

Question. How important is basic research to these advances?

Answer. There is considerable evidence accumulating that basic research on oncogenes contributes substantially to our understanding of the fundamental processes which regulate cell behavior and gene expression. Growth processes are likely to be regulated similarly to other biological processes which require temporal expression of gene products, such as differentiation and development. Scientists are now utilizing an array of technologies such as DNA recombinant biology, monoclonal antibody synthesis, cell transfection, cell microinjection, and in-utero implantation to examine the transforming effects of oncogenes on single cells in culture as well as the tissue specific effects of oncogene expression in animal modes. Thus, oncogene research is likely to provide critical new information about cancer in the context of development, differentiation, and growth. Oncogene research directly provides theoretical and practical knowledge applicable to cancer prevention, cancer diagnosis, and cancer treatment and indirectly helping to develop the area of gene therapy.

CANCER CENTERS

Question. Dr. DeVita, how many cancer centers are you currently funding?

Answer. In the FY 1987 budget, we expect to be able to fund 58 cancer centers.

Question. Will you continue to fund that number under the President's FY 1988 request?

Answer. Yes, the request for FY 1988 also includes 58 centers.

Question. Are these centers funded at their fully recommended level?

Answer. The FY 1988 request will support non-competing centers at levels committed to on the basis of the FY 1987 award -- that is, continuing the effects of any prior year reductions that have been taken. The competing centers in the FY 1988 request are included at a level estimated to be 90 percent of their current funding level which is equal to a reduction of approximately 30 percent from estimated recommended levels of funding.

CUTS FOR AIDS

Question. Dr. DeVita, over the last few years, have you been forced to make cuts in certain cancer research efforts in order to accommodate the increased emphasis on AIDS research? Specifically, what has been cut? How much of your total budget request this year is for AIDS? Will programs be cut to accommodate the AIDS efforts?

Answer. NCI's 1988 budget request for obligational authority is $1,366,935,000, of which $84,896,000 or 6.2 percent of the total budget is specifically requested for AIDS research. The comparable levels for 1987 are $1,339,124,000 and $61,674,000 and 4.6 percent of the total NCI budget.

No specific programs have been eliminated in order to support AIDS research although approximately $20.0 million has been targeted for AIDS research that would have been used to support cancer projects, including grant, contract and intramural research activities.

FTES

Question. Dr. DeVita, how many full-time equivalent staff positions do you currently have on board?

Answer. As of February 28, 1987 the NCI has 2,107 employees on board, equating to an annualized full-time equivalent workforce of 2,072 positions.

Question. How many are requested in FY 1988?

Answer. The 1988 budget requests 2,122 full-time equivalent workyears.

Question. How many did you request in your original budget request?

Answer. The 1988 By-Pass budget submission to the President requested 2,500 full-time equivalent workyears.

Question. Have you had problems in the past with perhaps having enough funds but not enough staff positions?

Answer. Not in recent years. Current FTE levels are consistent with funding levels. However, over the past few years we have operated within lower staffing ceilings.

PRIORITIES

Question. Dr. DeVita, for a number of years now, Congress had mandated a minimal number of new and competing grants. Are there other programs in your budget, in addition to the research grant program, that you think should receive increased attention?

Answer. The President's budget permits us to support the highest priorities in all mechanisms, even though, there are always additional scientific opportunities that could be supported with additional funds.

Question. What are they, and why?

Answer. As you are aware, we have always felt that the cancer research enterprise is one that must represent a program balance -- a balance of basic research opportunities with the translation or application of these findings into the medical establishment. This is accomplished by utilizing various mechanisms of support. In addition to research project grants, which are the mainstay of our support of basic research, these include: contracts, the intramural research program, clinical cooperative groups, cancer centers and initiatives supported through the cancer prevention and control program. It is through this latter initiative that many of the prevention efforts regarding diet and cancer as well as community activities (e.g., Community Clinical Oncology Program) are funded.

SURVIVAL RATE

Question. Dr. DeVita, what advances have we made in increasing the cancer survival rate?

Answer. Long-term trends in cancer incidence and survival are not as readily determined as are the trends in mortality. The mortality trends are derived from death certificates which are reportable by law to the National Center for Health Statistics. There is no such law across all the states requiring the reporting of cancer. In 1973, the NCI established the Surveillance, Epidemiology, and End Results (SEER) program to capture information on cancer incidence and survival in a uniform manner comparable over time. The SEER program captures data from some 10 percent of United States population, and is now able to report trends in incidence and survival since 1973. Prior to 1973, data on cancer incidence and survival were derived from various surveys and hospital-based patient series. The table below depicts specific survival data; a discussion of survival rates and for specific sites follows.

Trends in Five-Year Relative Survival
Rates for Cancer, for Whites and Blacks

Cancer Site	1960 - 1963		1977 - 1983	
	Wh	Bl	Wh	Bl
All sites	39	27	50	38
All sites minus lung	41	32	55	44
Lung & bronchus	8	5	13	11
Oral cavity & pharynx	45	N/A	53	31
Stomach	11	8	16	16
Colon & rectum	42	32	52	45
Larynx	53	N/A	67	57
Melanoma of skin	60	N/A	80	38
Breast (female)	63	46	75	62
Cervix	58	47	67	60
Corpus	73	31	85	54
Prostate	50	35	71	62
Testis	63	N/A	89	78
Bladder	53	24	76	53
Kidney	37	38	50	53
Hodgkin's disease	40	N/A	74	74
Non-Hodgkin's lymphoma	31	N/A	49	48
Leukemia	14	N/A	33	28

All cancer sites combined: Among whites, the incidence from all sites combined has increased by 17 percent since 1970 or by slightly over one percent per year. The mortality rates have been increasing by less than one percent per year. This is consistent with the observed increase in survival rates, with less than 40 percent of the cancer patients diagnosed in 1960 to 1963 surviving at least five years to a 50 percent five-year survival rate for patients diagnosed in 1977 to 1983. The trends for blacks are similar except that the incidence and mortality rates are at a higher level and survival is at a lower level than for whites.

All sites minus lung: This categorization of cancer sites is important to examine because lung cancer is due, almost entirely, to smoking and could be almost totally eradicated by eliminating smoking. Although the incidence rates have been increasing, at one percent per year, the mortality rates have decreased from 136.1 per 100,000 persons in 1960 to a rate of 121.9 per 100,000 persons in 1984. This decrease in mortality reflects our ability to treat more effectively the cancer patient. The improved prognosis for these patients can also be seen in the five-year survival rates which have increased from 41 percent in 1960 to 1963 to 55 percent in 1977 to 1983. Unfortunately, neither the cancer incidence nor the cancer mortality rates for blacks show decreases when lung cancer is subtracted.

Colon and rectum: Due to inconsistencies in the classification of colon cancer on death certificates, it is important to combine colon and rectal cancer when looking at trends. The incidence rate of colorectal cancer has been increasing slightly at one percent per year since 1970. The mortality rates have been decreasing slightly for whites which is consistent with the observed improvement in the survival rates, from a five-year rate of 42 percent in 1960 to 1963 to 52 percent in 1977 to 1983. The mortality rates among blacks have shown small increases between 1970

and 1984, from 21.2 to 23.1, respectively, this is about a half of one percent per year increase.

Lung and bronchus: Lung cancer is one of the most preventable of all cancers. It accounts for 16 percent of all new cancer cases and 28 percent of all cancer deaths. The five-year relative survival rate is very poor, 13 percent for patients diagnosed in 1977 to 1983. Both the incidence of, and the mortality from this cancer have been increasing very rapidly at an average of 2.5 percent per year for both incidence and mortality. The five-year survival rates have shown increases but the survival is still very poor and there is evidence that those who survive the cancer are at higher risk of dying prematurely due to coronary problems. There is now evidence that the incidence rate for lung cancer in white males has begun to decline since both the 1983 and 1984 incidence rates are less than the 1982 rate; however, the incidence rate for white women and the black population continues to increase.

Female breast: Cancer of the female breast has been increasing in incidence, but we believe that this is due to increased detection from screening programs and self detection. The mortality rates have been essentially stable among white women and increasing among black women while the survival rates have been increasing for both racial groups.

Prostate: Cancer of the prostate affects about 90,000 men per year. Both the incidence and survival have been increasing dramatically, while the mortality rates have been level. We believe that the increases are due in large part, but not entirely, to increased detection.

Urinary bladder: The incidence of cancer of the urinary bladder has been increasing at about two percent per year. Over this same time period the mortality rates have been decreasing and the survival rates have been showing dramatic improvements. The mortality rate has decreased by 27 percent between 1960 and 1984 among whites, from 4.8 deaths per 100,000 population in 1960 to 3.5 deaths per 100,000 population in 1984. During this same time period the five-year relative survival rates have improved from 53 percent for white patients diagnosed in 1960 to 1963 to 76 percent for those diagnosed between 1977 and 1983. The incidence of bladder cancer among blacks is about half that for whites. The mortality rates are about the same with a lower survival rate.

Oral cavity and pharynx: Cancer of the oral cavity and pharynx affects about 30,000 people yearly and about 9,400 people die from this cancer every year. The incidence rates have been stable over time for whites while the survival has been increasing and the mortality decreasing for both whites and blacks.

Non-Hodgkin's lymphomas: Non-Hodgkin's lymphomas have increased in incidence by about 100 percent since 1970. The mortality rates have also increased but not nearly as dramatically. The difference in the incidence and mortality trends are due to our increased ability to successfully treat this disease. The five-year relative survival rate has increased from 31 percent in 1960 to 1963 to 49 percent in 1977 to 1983 for whites.

Leukemia: Leukemia, which affects 26,000 people per year has had level incidence rates for at least the last 14 years. The mortality rates have been steadily decreasing at slightly less than one percent per year -- a reflection of our better understanding of this disease which, in turn, has led to improved treatments.

Pancreas: Cancer of the pancreas affects about 26,000 Americans every year. The five-year survival rate is abysmal, about two percent and virtually everyone diagnosed with this disease dies of it.

Stomach: Stomach cancer has a relatively poor five-year survival rate, about 16 percent. However, the survival has been steadily improving due to more successful treatments. The incidence has been decreasing at about two percent per year since 1970 while the mortality has been decreasing at a somewhat faster rate, 2.5 percent per year.

In summary, the data leads us to conclude that cancer treatment continues to improve, and that with future changes in smoking and dietary habits, we expect major reductions in cancer incidence and mortality. In some cases the treatments are more successful because of earlier diagnosis or because a new, more effective treatment has been developed. With major reductions in smoking and lower fat and higher fiber diets, with an increase in cancer screening, and with continued research on cancer treatment we can expect significant reductions in cancer incidence and mortality in the future.

Question. Are there particular types of cancer you have been particularly successful in treating?

Answer. Advances in therapy for cancer have led to impressive progress. The discovery that drugs can cure some cancers was a major achievement, and showed that even advanced malignancies can respond to systemic therapies; new advances in basic research and technology have created new opportunities to deal successfully with cancer once it is established.

Because of advances in treatment, we have seen improvements in survival statistics for cancers of the breast, colon and rectum, as well as for childhood leukemia, ovarian cancer and testicular cancer, the most prevalent cancer in young men between 18 and 35. Lymphomas, the seventh most common cancer, are now curable as a result of improvements in chemotherapy.

The use of adjuvant therapy has proven effective in treating many resistant tumors, including those of the breast, rectum, colon, lung, and sarcomas. Adjuvant therapy is the use of drugs, hormones or biological agents in combination with a definitive local treatment like surgery or radiation. The theory is that in many cases microscopic deposits of cancer cells spread from the original tumor causing the tumor to spread to other parts of the body. However, if they can be tracked down and destroyed early, a cure is possible. This requires a systemic, "body-wide" treatment, not just removal of the primary mass. Clinical trials have reported positive results most recently for colon cancer, which have shown a 20 percent improved disease-free, five-year survival. Patients with rectal cancer have shown a 24 percent improved five-year survival

with adjuvant treatment with both radiotherapy and drugs. A review this year combining all published clinical trials has shown that post-operative adjuvant treatment with drugs significantly improved long-term disease-free survival for patients with colorectal cancer.

An NCI-sponsored study had shown the effectiveness of combination chemotherapy in preventing recurrence of breast cancer in women with no spread of their cancer to the lymph nodes, but who have an aggressive tumor type. In this study, 93 percent of the treated group remain free of cancer recurrence at two years, and overall survival was 100 percent for the treated group. These results are significantly better than those for the untreated group. This is important because it suggests that certain high-risk patients, not ordinarily receiving chemotherapy, can now be identified by measurement of tumor growth rate and be more effectively treated.

Basic biological research into the very working of the cell, however, offers the most optimistic opportunities in cancer treatment. In some cases these advances in basic knowledge have already been used for the practical benefit of the cancer patient.

Basic immunological research has resulted in the development of monoclonal antibodies, Interleukin-2 (IL-2) and Lymphokine Activated Killer (LAK) cells. The first effective use of human immune cells called LAK cells, used in combination with IL-2, has been carried out in patients with advanced cancers. This process involves the transfer of immune cells directly to the patient, and is called "adoptive immunotherapy". During the past year, this treatment has been most effective against kidney cancer and melanoma.

Several other very practical recent effects of progress in biology have benefitted the cancer patient. The first involves patterns of oncogene expression in pediatric tumors. Oncogenes are genes found in every living cell which, when activated, apparently cause the cell to become malignant. An NCI scientist recently observed that a subset of neuroblastomas, a type of pediatric tumor, had a different pattern of oncogene expression than most other neuroblastomas, even though they looked alike under a microscope. This particular subset had been unresponsive to treatment and was almost always fatal. However when a treatment regimen developed for another tumor with similar oncogene expression was applied to this subset, it resulted in 60 percent of the cases being brought under control.

Patients with small-cell lung cancer, show an amplified version of an oncogene called c-myc and have a shorter survival than others who do not. This offers the hope that regulation of oncogenes by inhibiting expression or interfering with oncogene products may improve response rate in patients with previously poor prognosis.

Another example of basic science's practical effects in treatment involves drug resistance, which has been a major problem in effectively treating cancer. This is the apparent intuitive ability of cells to develop a resistance to a variety of previously effective anti-cancer drugs. It has recently been found that cells may protect themselves from cancer drugs the same way they protect themselves from environmental poisons. Cancer cells -- already made

abnormal through exposure to carcinogens -- may be protecting themselves from other carcinogens, and, in the process, detoxifying drugs being used against them. This knowledge is the first step in allowing us to develop methods to overcome this process, allowing treatment to remain effective throughout its course. NCI has already added drug-resistant human cells to the initial screening for effective anti-cancer drugs.

However, cancer treatment could be vastly more successful if patterns of care for cancer patients were uniform and state-of-the-art therapy was employed on a national scale. For example, throughout the U.S., it is estimated that as few as 32 percent of premenopausal women with breast cancer actually receive adjuvant chemotherapy, which has been shown to be capable of reducing mortality by a minimum of 25 percent. Perhaps as few as 60 percent of patients with the highly curable diffuse aggressive lymphomas receive chemotherapy adequate to be completely curative. It was recently estimated that as many as 9,000 patients may die annually because they receive insufficient doses of chemotherapy. In fact, if every cancer patient in the U.S. today were to receive the best treatment available, there could be an immediate 10 percent improvement in five-year survival. NCI's community-based prevention and control programs are specifically aimed at promoting widespread optimum cancer care.

PAIN RESEARCH

Question. Dr. DeVita, last month this Subcommittee received a report from the NIH describing efforts underway in pain research. Would you please highlight what is being done at the Cancer Institute in pain research?

Answer. As detailed in the NIH Report on pain research, the National Cancer Institute is supporting studies in pain management that cover a wide spectrum of research efforts. These include investigations into the pharmacological basis of analgesic control, assessments of pain management techniques, determination of psychological factors influencing pain, and educational interventions aimed at health care professionals and the public. Approximately 80 percent of pain due to cancer can be controlled with existing pain management techniques; therefore, changing professional behavior to adopt the optimal contemporary approaches is the keystone to achieving improvement in pain management for the overall population.

The following are highlights of NCI-sponsored research that are presented in the NIH Report. Major efforts in pain research are underway at several centers, including Memorial Sloan Kettering Cancer Institute, to define the pharmacologic and pharmacokinetic relationship between commonly used narcotic analgesics. Clinical trials on heroin and Dilaudid-HP (hydromorphone) are being conducted to define the respective roles of these analgesics in controlling severe cancer pain. These studies are investigating the bioavailability of heroin after repetitive dose administration, determining the relative analgesic potencies of single and repeated intramuscular doses of heroin and hydromorphone, and comparing the analgesic effectiveness and mood altering properties of high-dose preparations of heroin and hydromorphone. In other studies, investigators are developing innovative methods of delivering

narcotic analgesics and minimizing their side effects as well as assessing pain measurement instruments.

Investigators in a number of institutions are conducting research on psychosocial interventions to enhance coping mechanisms, including stress reduction and other behavioral approaches for cancer patients with pain resulting from radiation and chemotherapy. The Fred Hutchinson Cancer Research Center in Seattle, Washington carries out more bone marrow transplants than any other center and is working to develop and refine interventions for the control of oral pain resulting from toxicity, due to either local infection in the mouth or radiation or chemotherapy, prior to transplantation. Biological and biosocial factors that affect the incidence and severity of toxic complications and how they influence pain management, duration of hospitalization, and costs also are part of this study.

The NCI supports educational conferences directed toward improving knowledge of pain assessment and the delivery of appropriate pain management and post-doctoral training programs in pain control. Post-doctoral studies in pain control include the psychological aspects of cancer pain. The attitudes and beliefs of patients and spouses concerning pain and its treatment, and physician decision-making in cancer pain management.

Future NCI initiatives will support research on pain in pancreatic cancer patients through clinical trials designed to assess the effectiveness of conventional and innovative treatment approaches to pain management, through the development of better ways of improving drug delivery systems and assessing analgesic control, and through the implementation of the most effective cancer pain management practices in community settings.

In addition, a collaborative effort with the Upjohn Company will involve a compound currently under evaluation in clinical trials by the National Institute of Dental Research. Should results in the dental population prove to be promising, the compound will be tested for safety and efficacy of pain relief in post-operative patients of the intramural NCI Surgery Branch.

APPORTIONMENT

Question. Dr. DeVita, what kind of flexibility do you have over your budget? Are you able to transfer funds within accounts to respond to unanticipated research needs?

Answer. The field of cancer research is dynamic; as our knowledge of biological processes including the cancer process broadens, new avenues of scientific exploration are opened for research. NCI must be in a position to be able to quickly react to changing scientific opportunity and adjust its allocation of resources to best take advantage of that opportunity. It is not always possible to predict the exact mechanism of support that will be appropriate to support an emerging scientific endeavor. Up until the recent past, the Institute has been able to rapidly adjust its resource allocations to take advantage of the latest scientific opportunity. If the adjustment resulted in a marked change in program direction that was felt appropriate to advise the Congress, a reprogramming request would be submitted for consideration.

However, over the past two years a new requirement relating to the apportionment process has been in effect. This process mandates that if the Institute's scientific opportunities require an adjustment of funds amongst the mechanisms of support, approval must first be obtained from the Director, NIH before this adjustment can be effected. In some cases approval from the Office of Management and Budget may need to be obtained.

Question. Would more flexibility compromise your ability to award the total number of grants Congress traditionally mandates in the appropriations bill?

Answer. No, if the Institutes were to return to their previous flexibility, the support for a specified number of research project grants would not be compromised. One of the major mechanisms to support basic research is through research project grants. Since the Institute holds basic research as its highest priority, we would ensure that any Congressional mandated level of research project grants would be supported.

CLINICAL TRIALS

Question. How many clinical trials will you fund in FY 1987?

Answer. NCI will continue to channel considerable resources into its clinical trials programs; total budgetary resources in support of clinical trials are expected to exceed $196 million in 1987, with 12 major new trial efforts being initiated at an estimated first year cost of about $24 million. These clinical trials increasingly reflect progress in basic research, and are the result of coordination of the development of anticancer drugs, radiation modalities, and biologics within an integrated network of Cancer Centers, Cooperative Groups, Outreach Programs, and Community Clinical Oncology Programs.

New treatment efforts include extramural and intramural clinical evaluations of recently characterized biological response modifiers, further studies of adoptive immunotherapy involving LAK cells and Interleukin-2, and introduction of new protocols into the Clinical Cooperative Group supported trials. NCI will begin a chemoprevention trial to identify intermediate endpoints for prediction of later reduction in cancer rates and a diagnosis-related trial for staging and monitoring carcinoma of the prostate, lung, and other sites.

Question. How many are ready to be funded in FY 1988?

Answer. For 1988, we have identified 15 major new clinical trial efforts that will be ready for initiation.

Question. How many will you fund under your current budget proposal?

Answer. Under the President's Request, we will be able to initiate seven out of these fifteen major new trial efforts. Of the new efforts ready to begin in 1988, these seven are of the highest priority and are detailed as follows:

- Women's Health Trial - Alteration of Diet in Population of Women at High Risk to Breast Cancer (first year cost of $7.7 million);

- Phase I Studies of New Chemopreventive Agents (first year cost of $0.2 million);

- Clinical Cooperative Group Trials, including Breast Cancer and Rhabdomylocarcoma Studies (first year cost of $1.3 million);

- Clinical Trials of BRMs - Intramural (first year cost of $3.6 million);

- Clinical Trials of BRMs - Extramural (first year cost of $3.0 million);

- Combination LAK and Chemotherapy in Ovarian and Lymphoma Cancers (first year cost of $0.5 million); and

- Small Cell Lung Cancer Protocol (first year cost of $0.5 million).

Question. Specifically, which ones would not be funded?

Answer. Eight major new trial efforts which will not be funded within the Request level. In addition, the Women's Health Trial will be initiated within the Request at significantly reduced levels. These efforts are listed below in priority order:

- Clinical Trials of BRMs, including studies of Laminin Fragments in Patients with Melanoma and Breast Cancer and of BRMs in the Treatment of Certain Leukemias - Intramural (first year cost of $0.8 million);

- Clinical Trials of BRMs, including studies of IL-1 and IL-3 in Cancer Therapy - Extramural (first year cost of $2.0 million);

- Expansion of Community Clinical Oncology Program (first year cost of $6.0 million);

- Additional Chemoprevention Trials to Identify Intermediate Endpoints for Prediction of Later Reduction in Cancer Rates (first year cost of $1.4 million);

- Women's Health Trial - Expansion of level of effort supported by request to optimal pace (first year cost of $7.1 million);

- Clinical Cooperative Group Trials, including additional Breast Cancer Studies, Leukemia Research, and Treatment of Brain Tumors (first year cost of $3.0 million);

- Use of Tumor Necrosis Factor and Chemotherapy in the Treatment of Breast Cancer (first year cost of $0.3 million);

- Cancer Centers (first year cost of $6.0 million); and

- Lung Cancer Prevention in Tin Miners (first year cost of $0.5 million).

BUDGET DATA

Question. Does your budget request include out-year funds to level fund research project grants?

Answer. Our budget request includes $264,213,000 for continuation costs of competing research project grants awarded in 1988.

Question. What is your request without those funds?

Answer. Our request without those funds but including the proposed carryover from 1987 is $577,594,000.

Question. How much is cut in FY 1987 as part of your FY 1988 request?

Answer. As part of our FY 1988 request, it is proposed that $26,492,000 be carried over from FY 1987 to FY 1988.

Question. What was your original budget request for FY 1988?

Answer. Our FY 1988 preliminary budget to NIH was $460,451,000 plus $182,477,000 for AIDS research funding included in the Office of the Assistant Secretary for Health (OASH) for a total of $642,928,000.

AIDS BUDGET

Question. Dr. Fauci, in your original budget request, how much did you include for AIDS?

Answer. In the original budget request, all funding for AIDS was reflected in OASH. Our share of that was $182,477,000.

Question. How much of an increase would that be over last year?

Answer. That amount is an increase of $36,627,000 over the $145,850,000 for AIDS research included in our FY 1987 appropriation.

Question. What is requested in the President's FY 1988 budget?

Answer. The FY 1988 President's budget request reflects $201,673,000 for AIDS research in our Institute.

Question. Dr. Fauci, How do you respond to the National Academy of Sciences recommendation that we spend $1 billion on AIDS research by 1990? In your professional judgment is this a reasonable figure?

Answer. If one considers that the $1 billion is a projection to 1990, that is not an unreasonable figure. Since AIDS research is such a rapidly evolving field, we at NIH are constantly reassessing our needs. Thus, we will have a better idea of our needs in 1990 as time goes on.

BASIC SCIENCE

Question. Dr. Fauci, how much has basic research contributed to your ability to move as quickly as you have in identifying the AIDS virus and designing therapies to combat the spread of the disease?

Answer. I think it is safe to say that we have learned more about this disease, about the virus that causes it, and the mechanisms through which the virus causes damage, in a shorter period of time than had been the case with any other disease in history. We were able to isolate the virus and determine its structure and its genetic make up so quickly because of the expertise in virology and the incredible advances in technology in the field of molecular biology that had resulted from our past efforts in basic research. Our previous investments in the virology of retroviruses, which cause cancer in animals, paid off, not only in a better understanding of the etiology of certain tumors, but in providing a cadre of experienced scientists and advanced technology that were indispensable for our studies of the AIDS virus and its disease-causing mechanisms.

Similarly, past research on basic immunology and on immunologic diseases provided the expertise and technology that was immediately applied to studies that determined the exact defect of the immune system caused by the HIV virus and how this damage causes a cascade of other disorders in the function of the immune system. Research in areas such as transplantation immunology provided us with approaches toward immune reconstitution such as bone marrow transplantation.

There is no doubt that the quick response we have been able to mount against this disease was due to our past investment in basic research.

VACCINE DEVELOPMENT

Question. Dr. Fauci, what is the status of your vaccine development program?

Answer. In addition to an AIDS vaccine, we have assigned priority to the development of 14 vaccines, seven for use primarily in the United States and seven for use primarily in the developing world. The status of the vaccines targeted for accelerated development is as follows:

Priorities for U.S. Immunization

Pertussis (improved)	Two acellular Japanese-produced vaccines are being evaluated in Sweden in the first placebo-controlled trial of acellular products. At least five other candidate vaccines are in early trials in the United States and abroad.
Hepatitis B virus (rDNA)	A yeast-derived vaccine was licensed in July 1986. A mammalian cell-derived vaccine is being tested for efficacy, another for safety and immunogenicity.
Haemophilus influenzae b	A polysaccharide vaccine for use in children 24 months and older was licensed in April 1985. A protein-polysaccharide conjugate vaccine for use in infants is being tested for efficacy in a controlled trial in Alaska.
Respiratory syncytial virus (RSV)	The presence of a second RSV type has been confirmed. Each of two surface glycoproteins, F and G, confer protection in animals. The genes for both have been cloned and expressed by vaccinia recombinants.
Influenza virus (live)	Field trials are in progress to compare cold-adapted attenuated monovalent and bivalent A vaccines with inactivated vaccines.
A	
B	A cold-adapted attenuated influenza B vaccine has been shown to be safe in early Phase I trials.
Varicella virus	A "research lot" of live attenuated varicella virus vaccine has been shown to be safe and effective in children with acute lymphocyte leukemia (ALL) in remission. The manufacturer's "consistency lots" prepared from the same seed have been safe and effective in normal children, but too reactogenic in children with ALL. A production process is being sought that will yield a commercial vaccine equivalent in safety and immunogenicity to the research lot.
Gonococcus	Vaccines containing synthetic peptides from the conserved domain of the pilus protein from three different strains plus a major iron regulated protein of the

gonococcal cell, and/or the H-8 antigen of the gonococcal cell membrane are ready for Phase I trials.

Priorities for International Immunization

Pneumococcus (conjugate)	NIAID, in collaboration with CDC and USAID, proposes to develop protein-polysaccharide conjugate vaccines for the 6 to 8 most important pediatric serotypes and to select one or more sites where their efficacy can be tested in young children in the developing world.
Rotaviruses	A number of live oral vaccine candidates prepared from mutants of human isolates, from animal (bovine, rhesus) rotaviruses, and from animal-human reassortant strains have shown varying degrees of efficacy. Field trials are in progress to test the extent of cross-protection vs the four human serotypes and to examine the possibility of interference with oral poliovirus vaccine.
Malaria (P. falciparum sporozoite)	Two vaccines, one a synthetic peptide and the other a recombinant protein, based on the circumsporozoite proteins of Plasmodium falciparum are undergoing Phase I trials.
Salmonella typhi (typhoid)	The Ty21a live, oral vaccine licensed in Switzerland is under review in the U.S.; efficacy studies of new formulations are continuing in Chile and Indonesia. In addition, attenuated oral vaccines containing auxotrophic mutants are being tested in volunteers, and a Vi polysaccharide antigen is being tested for efficacy in Nepal (by NICHD) and in South Africa.
Shigella (dysentery)	Army scientists have transferred genes coding for antigens of several Shigella species to E. coli K-12 or to S. typhi Ty21a to produce experimental oral vaccines. Such vaccines protect monkeys; requirements for optimal expression of antigens for human use are under study.
Vibrio cholera	An inactivated oral vaccine consisting of B subunits combined with killed whole cells provided 85 percent protection for 4-6 months in a WHO-sponsored field trial in Bangladesh. A live oral vaccine containing a genetically engineered strain lacking the A subunit toxin gene (A minus, B plus) and that does not

	produce a Shiga-like toxin has afforded 87 percent protective efficacy against the virulent parent strain in volunteer challenge studies. Efficacy trials in endemic areas are planned.
Leprosy	Several complex components of Mycobacterium leprae have been characterized as potential immunogens. WHO is to conduct efficacy trials of two vaccines - heat-killed M. leprae cells alone; heat-killed M. leprae cells plus live BCG - in India.

Question. What plans do you have for 1988?

Answer. Work will continue on the above listed vaccines as well as on others, such as hepatitis A. Work will be guided by the outcome of efficacy trials now in progress on a conjugate vaccine for Haemophilus influenzae being tested in Alaska, and on two acellular Japanese-made pertussis vaccines being tested in Sweden. It is anticipated that correlates of immunity determined in the Swedish trial will facilitate assessment of the potential of other candidate acellular pertussis vaccines. Three such experimental vaccines are to be tested in the Institute's Vaccine Evaluation Units while work continues on the development of the next generation of vaccines produced by recombinant DNA technology.

Question. How much does your budget request include for vaccine development?

Answer. Our budget request for FY 1988 includes $49,931,000 for vaccine development. Of that amount, $39,379,000 is related to our Accelerated Development of New Vaccines Program.

Question. In the past, have you had to "borrow" from other research activities to provide adequate funds for developing a vaccine?

Answer. In the recent past we did redirect funding for the pertussis vaccine effort. When it became possible for us to collaborate with Swedish investigators in testing the efficacy of two Japanese-made acellular pertussis vaccines, a supplemental budget request was submitted seeking funds for support of the work in Sweden. When these supplemental funds did not become available, the Institute reduced or delayed work on other contract-supported projects to provide partial support for the pertussis vaccine trial in Sweden.

Question. Will other research areas be cut in FY 1988 to pay for vaccine development or other AIDS-related research? Specifically, what will be cut?

Answer. The 1988 request does not include any reductions made specifically to permit funding of additional AIDS research or vaccine development efforts.

Question. Dr. Fauci, I have been told that we may not be moving as quickly as we can toward developing a vaccine because many private companies are concerned about vaccine liability. Can you comment on this?

Answer. Testimony from vaccine manufacturers and others at numerous conferences that have examined this issue has indicated that biologic manufacturers are hesitant to invest venture capital in products such as vaccines that carry high risk and little profit. It is clear that foreign manufacturers in England, France and Japan have been reluctant to enter the U.S. market because of liability. A system that deals fairly with the liability issue will encourage more manufacturers to invest in vaccine research and development and to produce and market more vaccines.

Question. Are there any other possible barriers to developing an AIDS vaccine?

Answer. There is always the possibility that there will be some scientific or medical reason that will keep us from developing an effective vaccine, but I believe that most workers in this field are optimistic that we can overcome such problems. Our expanding basic and applied research programs in virology and immunology are expected to provide answers to the large number of questions that must be answered during the course of research and development of an AIDS vaccine. We will need to determine what type of immune response is protective in a vaccinated individual and to analyze the effect of antigenic and genetic variation of the HIV virus.

AIDS DRUGS

Question. Dr. Fauci, you reported on the status of the experimental drug program, funded by an amendment Senator Proxmire and I added to last year's bill, when Dr. Windom, the Assistant Secretary for Health, was here last week. For the record, would you mind giving us an update again on this program?

Answer. The amendment to the FY 1987 budget has been obligated or committed as follows: a) five additional AIDS Treatment Evaluation Units (ATEU's) were funded located at Duke University, Mount Sinai Medical School, Albert Einstein Medical School, Tulane University, and the University of Minnesota; b) the program of National Cooperative Drug Discovery Groups (NCDDG's) was strengthened; c) the existing ATEU's are being supplemented to perform additional clinical studies in pediatric and hemophiliac patients; d) the Clinical Trial Coordinating Center was supplemented to accommodate this increased work load; e) a clinical research program, the AIDS Clinical Study Groups (AIDS-CSG's) was launched; and f) the preclinical drug development effort was intensified at the NCI and NIAID. This plan will permit the intensified effort at the clinical, preclinical and basic research levels. In particular, the AIDS-CSG's are designed to support a network of distributed clinical research groups throughout the United States so that access to experimental therapies can be expanded nationally. These units will complement the ATEU effort to perform the necessary clinical evaluations to bring new and improved therapies to the clinic faster and also serve to increase the national resources of trained personnel for the clinical evaluation of patients.

Question. Have all the treatment evaluation units been set up? How may patients are participating? How many do you expect to participate by the end of the year?

Answer. Nineteen ATEU's have been awarded. Of these, fourteen were awarded in 1986 and five were awarded on January 2, 1987. Sixteen protocols, involving seven different compounds, are planned for implementation by June, 1987. All nineteen ATEU's are actively working to recruit patients into these clinical trials. Four clinical protocols are currently active. These four protocols are: the evaluation of AZT in patients with Kaposi's sarcoma; the evaluation of two doses of AZT in patients with AIDS post Pneumocystis carinii pneumonia (PCP); the evaluation of foscarnet in patients with cytomegalovirus retinopathy; and Phase I trials of AZT in children. The number of patients that have been enrolled in these four protocols as of March 30, 1987, is 323. Approximately 800 patients were screened to obtain these 323 subjects. It is estimated that by the end of the year approximately 1,500 patients will be entered into experimental trials at the ATEU's.

Question. Is there a sufficient supply of AZT to conduct all of the AZT-related studies NIAID would like to conduct?

Answer. The clinical trials testing AZT that have been implemented in the ATEU's are of high priority. Supply of AZT for clinical trials of AIDS in hemophiliacs, pediatric patients, patients with AIDS dementia complex and to evaluate the combination of AZT plus acyclovir as well as the combination of AZT plus interferon has been committed to this effort. More recently, since the drug has been approved for marketing by the FDA, it has been possible to plan a variety of other studies, including AZT in patients with late ARC and a study of AZT in asymptomatic HIV antibody positive patients. Uncertainties about supply have complicated the planning and execution of these protocols.

Question. How does the supply of AZT affect NIAID's priorities for designing drug treatment protocols?

Answer. The highest priority AZT trials have begun. Uncertainties about the supply of AZT have complicated the NIAID's efforts to plan and implement additional much needed clinical trials of AZT in a variety of clinical situations. Unless commitment of drug is received early on, the effort expended in the development of a clinical protocol to evaluate AZT in a particular patient population can be entirely for naught. Protocol development takes considerable effort particularly since these trials are multicenter in nature. This multicenter quality means that research procedures must be rigorously standardized or the clinical trial may not provide the necessary answers. This protocol development process includes many hours of negotiation with the FDA, clinical investigators, ethical review committees, and the drug manufacturer. It is essential the drug commitments be made early in this process.

AIDS EDUCATION/PREVENTION

Question. Dr. Fauci, what role does NIH play in the AIDS education and prevention programs of the Public Health Service?

Answer. The mission of the NIH with regard to AIDS is primarily the performance of basic and applied research. Programs in AIDS education and the development of prevention strategies are within the mission of the Centers for Disease Control. The NIH, primarily within the NIAID, does have a small technology transfer/outreach program designed to provide the latest information on the disease, its epidemiology, the management of patients and the status of research efforts in drug and vaccine development to health care workers. With the possible exception of some NHLBI information dissemination projects, the NIH efforts are not aimed directly at the at risk population, but they are reached indirectly through health care workers.

During the past three years, the NIAID has sponsored 10 large (attendance of 3,000 to 5,000) AIDS-related conferences for health care professionals and support personnel in ten cities across the country. The NIAID has also collaborated with a number of professional societies by sponsoring workshops on AIDS tailored to their needs during their national or regional meetings. In collaboration with organizations co-sponsoring the NIAID AIDS conferences and with NIAID-supported research centers, an "AIDS Reference Guide for Health Care Professionals" was developed for the Los Angeles, Washington, D.C., and San Juan, Puerto Rico, areas.

During this year, smaller (attendance of 300-500) NIAID-sponsored AIDS conferences will focus on nurses and social workers. The first of these conferences was held in Philadelphia in February. Approximately 400 nurses and social workers attended this conference. Conferences in Nashville, Atlanta, Minneapolis/St. Paul, Seattle, Denver, and San Diego are in various stages of planning and will be held before the end of calendar year 1987.

The NIAID outreach program has begun a collaborative effort with the American Foundation for AIDS Research to update and maintain its "Directory of Clinical Trials," a directory which lists protocols for the evaluation of AIDS therapies in the United States. This will be published periodically in a version for physicians and a version for patients.

The National Institute of Dental Research is developing posters and leaflets for use in dental offices, clinics, and schools to increase awareness of the need for and use of barrier techniques by dental care providers.

NHLBI is supporting model programs to provide information and counseling to blood donors found to be infected with the AIDS virus.

This response addresses prevention efforts as related to education or outreach programs. A major NIH prevention effort, not addressed here, is in the area of vaccine development and testing.

Question. What will you be doing along these lines in FY 1988?

Answer. Many of the above mentioned efforts extend in FY 1988, and it is intended that all such efforts will continue.

The NIAID will plan another series of conferences for health care professionals for calendar year 1988 which will begin in FY

1988 and continue into FY 1989. The NIAID also plans to produce a series of video tapes for distribution to medical groups and medical schools. This effort will likely be initiated during FY 1988.

A collaborative effort between NIDR and NIAID is being developed to design conferences aimed at dental care providers similar to those sponsored by the NIAID in the past and to provide workshops jointly developed by NIAID and NIDR to professional meetings of dental care workers. The conferences will be planned in FY 1987 to begin in FY 1988.

The NIAID will collaborate with the NHLBI in a planning session to be held in FY 1987 for a series of information programs that NHLBI will begin in FY 1988. Assuming funds are available in FY 1988, the NHLBI will sponsor a series of informational and educational activities for public and private sector organizations involved in the donation and collection of blood. These efforts will focus on such areas as the predeposit of blood by elective surgery patients and the encouragement of increased blood donations by healthy donors. Professional education programs will be initiated to expand physician and surgeon referral of elective surgery patients for predeposit of blood, to foster increased use of other forms of autologous transfusion (intraoperative and postoperative salvage), and to eliminate medically unnecessary transfusions.

FTE'S

Question. Dr. Fauci, how have personnel ceilings affected the AIDS program?

Answer. Prior to FY 1986, no additional FTEs were provided for AIDS so it was only through realignment of existing personnel that we were able to conduct our AIDS effort. The timing of the allocation of increased personnel ceilings in FY 1986 followed the period of increased activity and funding; but we were able to keep pace with our most critical AIDS activities. In FY 1987, additional allocations of FTEs have been commensurate with the level of increased funds and activities.

Question. Have you had problems with perhaps receiving increases in funds but not enough staff positions?

Answer. As I mentioned, in the past that was a problem for us; but increased staff positions provided to us in FY 1987 are commensurate with the increased funding.

Question. Have you had to take staff people from other research activities to work on AIDS?

Answer: Prior to FY 1986, 46 FTEs were redirected from other research areas into AIDS. The redirected staff were laboratory and clinical personnel previously working in immunology and microbiology, together with health scientist administrators and support staff dealing with immunologic disorders and infectious diseases.

Question. How many full-time equivalent staff positions do you currently have on board?

Answer. During FY 1986, total NIAID actual FTE usage was 702. For FY 1987, the FTE ceiling is 768.

Question. How many are requested in FY 1988?

Answer. The FY 1988 President's budget reflects 771 FTEs.

Question. How many did you request in your original budget submission?

Answer. In the FY 1988 preliminary budget submission to NIH, the NIAID requested 856 FTEs including those for AIDS.

PERTUSSIS

Question. Dr. Fauci, last year you reported that scientists at your institute had cloned and sequenced the pertussis toxin gene, the apparent cause of the side effects caused by the present pertussis vaccine. Have there been any further developments in producing a safer vaccine?

Answer. Efforts to develop an improved pertussis vaccine that is safer than the conventional product continue to show progress at several different levels. One of the most significant studies, at present, relates to the ongoing efficacy trial in Sweden, partially supported by NIAID. In this study, two different acellular pertussis vaccines, manufactured by Biken of Japan, are being evaluated to determine their ability to protect against disease. The study also hopes to obtain serological correlate to protection in addition to more information about the safety of the vaccines. The study will terminate in August, 1987, and the data will be analyzed and disseminated by March, 1988. Similar efficacy trials to test other acellular pertussis vaccines are now in the planning stages and should provide additional information on dose, vaccine schedule, and the types of antigens needed to provide protection.

There are at least a dozen vaccine manufacturers who are actively involved in the development of acellular pertussis vaccines using new and highly advanced methodologies for its production and testing. Many of these manufacturers are located outside the United States, but all have an interest in providing a safe and immunogenic vaccine that can be licensed and marketed in the United States in the near future. Several of the more recent and innovative approaches involve the use of recombinant DNA techniques for producing specific antigens important in the disease process that can serve as potential immunogens. Much of this work has been done at NIAID's Rocky Mountain Laboratories (RML). Several recombinant proteins have now been expressed in large quantities and shown to be immunologically active.

Several phase I clinical trials are scheduled to begin within the next 2-3 months in NIAID's vaccine evaluation units, as well as other clinical sites throughout the United States. These studies will test the safety and immunogenicity of four new acellular vaccines in both children (4-6 years and 18 months) and infants (2,

4, and 6 months). Data will be available for most of these trials within approximately one year after the onset of the study.

HEPATITIS

Question. Dr. Fauci, I understand new advances have been made in understanding the cause of "infectious" hepatitis and developing a hepatitis A and B vaccine. Would you please comment on this?

Answer. Hepatitis A disease, formerly known as "infectious hepatitis," is caused by an enterovirus known as the hepatitis A virus (HAV). This virus is responsible for approximately 125,000 cases of hepatitis yearly in the United States. The infection is generally asymptomatic in children but may be severe in adults.

NIAID, industry, and U.S. Army scientists have independently developed experimental vaccine candidates. Clinical testing of the Army's inactivated vaccine began last year. This vaccine was shown to be safe and antigenic in a small number of volunteers. An industrially developed attenuated vaccine also has been tested in a few volunteers. Testing of an industrial inactivated vaccine and an NIAID-developed live, attenuated vaccine is planned later this year. Vaccines consisting of recombinant DNA (rDNA) derived peptides and proteins are in basic research stages.

A large step forward with HAV basic research occurred when NIAID intramural scientists, simultaneously with two industrial groups, utilized rDNA technology to learn details of the genetics of this virus. Consequently, the proteins of HAV are now better understood as is its relationship to other viruses. Monoclonal antibody technology is being used successfully to gain information about the portions of viral proteins capable of eliciting immune responses that neutralize or protect against infection and disease. The recent cloning and sequencing of attenuated viral strains has led to identification of the regions that are changed during adaptation and attenuation. RNA derived by rDNA techniques recently was shown to be infectious in animal models.

Hepatitis B infection, known many years ago as "serum hepatitis," is associated with approximately 200,000 infections in the United States annually. The outcome of infection varies from complete recovery to development of a chronic carrier state. A high percentage of these chronic carriers progress to more severe forms of disease such as cirrhosis and primary hepatocellular carcinoma--a form of liver cancer. A hepatitis B vaccine derived from human plasma was licensed in the United States in 1982. A second-generation vaccine derived by use of recombinant DNA technology was licensed in 1986. Both of these products were developed by Merck Sharp and Dohme; they are safe and effective, but expensive. Utilization of these products has been less than optimal due to their expense.

The NIAID has collaborated actively with companies that are developing other rDNA HBV vaccines. Clinical testing of products developed by Genetech and Connaught Laboratories has been performed at NIAID-supported vaccine evaluation units. These products have been shown to be safe and immunogenic in normal adult volunteers. Further testing of these products for efficacy in preventing

perinatal transmission is being undertaken in the Peoples Republic of China (PRC) through a bilateral agreement between PRC and the U.S. Public Health Service (CDC and NIH). Results from these vaccine trials in the PRC should be available in 1988. It is hoped that the licensure of vaccines prepared by multiple manufacturers will reduce the cost of vaccination against the hepatitis B virus in the United States.

MALARIA

Question. Dr. Fauci, have any new advances been made in vaccine development for malaria?

Answer. In the past year, two vaccines designed to prevent infection by malaria sporozoites have been produced and Phase I clinical trials have been carried out. One candidate is a synthetic polypeptide and the other is a recombinant DNA product. Both preparations were well tolerated in safety trials with only minimal side effects being noted in a few individuals. However, the immunogenicity of both vaccines was found to be much less than anticipated when compared to results in animal studies. Nevertheless, antibody levels in persons vaccinated with the synthetic polypeptide justify limited challenge studies. Another vaccine candidate, which would inhibit the sexual stages of the parasite in the mosquito, is being prepared by cloning the genes for the malaria gamete antigens.

Question. Are you planning any new clinical trials in this area in FY 1988?

Answer. Clinical trials involving the two sporozoite vaccines have been initiated. Expanded efforts including additional booster vaccinations and challenge studies will be carried out in FY 1988. One of these trials is being jointly supported by the NIAID and the USAID and the other by NIAID in collaboration with the U.S. Army. New clinical studies using a gamete vaccine are planned for FY 1988 by NIAID intramural scientists.

SEXUALLY TRANSMITTED DISEASES

Question. Dr. Fauci, how much money are you requesting in FY 1988 for research on sexually transmitted diseases other than AIDS? How much will you spend on chlamydia?

Answer. For FY 1988 we are requesting $26,320,000 for research on sexually transmitted diseases other than AIDS. Of this amount, approximately $4,260,000 will be related to chlamydia.

Question. Have there been any new developments in diagnosis and treatment of chlamydia?

Answer. The Institute helped to fund, in part, a new rapid diagnostic microscope test based on a specific monoclonal antibody to the chlamydia organism coupled to a flourescent dye. This test was licensed by the FDA and has been marketed commercially. It is now possible for a physician to test a patient in an office setting for the presence of the infecting organism microscopically. Another test licensed by the FDA and available commercially is an ELISA

(enzyme linked immunosorbent assay) that can be detected colorimetrically using special instruments. Although both these tests are inexpensive and simple to use in an office or clinical setting, they lack the specificity of the tissue culture test, the "gold standard" of chlamydial testing. Unfortunately, tissue culture is expensive to perform and requires highly skilled technicians; this makes it unsuitable for routine large scale screening programs or examinations in an office setting. Thus, the newer microscopic and ELISA tests have had considerable value in helping to stem the chlamydial infection problem.

RESEARCH CENTERS

Question. What impact will the President's FY 1988 budget request have on your institute's research centers?

Answer. We will fund 18 centers, the same as in 1987, but at a lower average cost.

Question. Have you planned to fund centers you will now be unable to fund?

Answer. We will be able to fund all of our centers as planned.

Question. Will the centers be funded at their fully recommended levels?

Answer. Funding for research centers in the budget request reflects a 7.7 percent reduction in the average cost from estimated Council recommended amounts.

APPORTIONMENT

Question. Dr. Fauci, what kind of flexibility do you have over your budget?

Answer. Under the current OMB apportionment process, I have lost some flexibility to move funds between mechanisms without approval at a higher level.

Question. Are you able to transfer funds within accounts to respond to unanticipated research needs?

Answer. It is difficult to make changes from one mechanism to another because any change I may propose must be offset by a compensating change in another Institute or a reapportionment must be submitted to OMB for approval.

Question. Would flexibility compromise your ability to award the total number of grants Congress traditionally mandates in the appropriations bill?

Answer. More flexibility would not compromise my ability to award the total number of grants mandated by Congress. We have consistently demonstrated in the past that we can manage our programs and comply with Administration and Congressional policies and concerns under the traditional apportionment process and reprogramming guidelines.

CLINICAL TRIALS

Question. How many clinical trials will you fund in FY 1987?

Answer. In FY 1987 we will support three major new clinical trials.

Question. How many are ready to be funded in FY 1988?

Answer. There are ten major new clinical trials ready to be funded in FY 1988.

Question. How many will you fund under your current budget proposal?

Answer. Within the FY 1988 President's budget, we will be able to support two major new clinical trials.

Question. Specifically, which ones would not be funded?

Answer. Following is a list of major new clinical trials ready to begin in FY 1988 but for which funds are not available:

Title	Mechanism	First Year Costs ($ in 000)
Enhancement of Bone Marrow Transplantation Therapy	R&D Contract	$2,640
Anti-Gamete Malarial Vaccine for P. falciparum and P. vivax	Intramural	100
Role of Fish Oil Dietary Supplementation in Treatment of Asthma	R&D Contract	235
Immunoglobulin Therapy for Respiratory Syncytial Virus Infections	R&D Contract	500
Efficacy of Polyethylene-glycol Conjugates of Allergy Extracts in Treatment of Allergies	R&D Contract	235
Treatment of Condyloma Acuminata with Biological Response Modifiers	R&D Contract	350
Clinical Trial with Different Regimens of Therapy for Candidemia	R&D Contract	215
Efficacy Trial for Live, Attenuated Hepatitis A Virus Vaccine	R&D Contract	230

BUDGET

Question. Does your budget request include out-year funds to level fund research project grants?

Answer. The FY 1988 budget request for NIDR is $144,081,000. This request includes $36,033,000 for future year

commitments associated with competing research project grants awarded in FY 1988.

Question. What is your request without those funds?

Answer. The NIDR FY 1988 budget request without those funds is $113,602,000.

Question. How much is cut in FY87 as part of your FY88 request?

Answer. The NIDR FY 1987 budget is reduced by $5,554,000 as part of the FY 1988 request.

Question. What was your original budget request for FY88?

Answer. The original FY 1988 budget request for NIDR was $135,446,000.

HERPES VACCINE RESEARCH

Question. Dr. Löe, I have often used your institute as an example of why consistent, across-the-board support for basic biomedical research is so important. Very few of us lay people would ever have guessed that the Institute on dental research would provide us with so many breakthroughs we have achieved in understanding the herpes virus. In fact, last year you reported promising results in the development of a herpes vaccine. What is the status of the vaccine development?

Answer. We reported last year that our intramural scientists have been collaborating with colleagues at the National Institute of Allergy and Infectious Diseases in the development of a recombinant vaccine that incorporates a gene for an important surface protein of herpes simplex type 1 (HSV 1) into vaccinia, the virus formerly used to vaccinate against smallpox. In the majority of cases, the vaccine protects mice against both lethal and latent infection with HSV 1, with protection persisting at least one year post-vaccination. A second booster inoculation provides added protection. Interestingly, we found that the HSV 1 vaccine also provided substantial protection against HSV 2--the cause of genital herpes. More animal research is needed before we can move on to clinical trials in human subjects.

New this year are studies evaluating a vaccinia recombinant vaccine which contains genes from both herpes and influenza viruses. If effective, this double recombinant would provide protection againt oral herpes as well as influenza.

In other herpes research, grantees are exploring the possibility of using a synthetic portion of the herpes surface protein used in the recombinant vaccine as the immunizing agent in itself. If effective, it would obviate the need of using the vaccinia virus as a carrier.

Question. In your professional judgment, do you think the budget before us today requests enough funds to keep pace with the science in this area?

Answer. Most of the research on the herpes vaccine is being supported through our Intramural Research Program whose budget we have tried to maintain at stable levels over the years. I would say that the herpes research is proceeding in an orderly and timely fashion.

SIGNIFICANCE OF BASIC RESEARCH

Question. How important was basic biomedical research to your efforts in developing this vaccine?

Answer. NIDR investigators have long been involved in basic research on all the oral tissues: their normal growth and development and their ability to maintain their structural and functional integrity in the face of environmental insults or injury. Herpes simplex virus type 1 (HSV 1) infection has been a particularly vexing problem because, like all members of the herpes family, the virus can move from the local site of infection to take refuge in nervous system cells, out of reach by the body's defense mechanisms. It is the reactivation of the virus from a state of latency that causes renewed outbreaks of painful sores on the lips or inside the mouth.

Our Intramural Program staff includes an excellent corps of researchers in virology and immunology whose development of an experimental vaccine has grown out of basic studies of the genetics of the herpes virus and the phenomena of latency and viral reactivation. In the course of this research, they have found evidence of herpes virus in brain cells and have noted that parts of the viral genome may be incorporated into human chromosomes. There, the viral genes may play a role in controlling the expression of certain human genes. In some cases, this may lead to the malignant transformation of the cell. Like other biomedical researchers, NIDR staff scientists have capitalized on the techniques of molecular biology. As their approach to immunization illustrates, they have used recombinant DNA technology to create a vaccine to protect against herpes infection. I might add that they have recently developed a technique for making human monoclonal antibodies which may help patients fight viral diseases for which there are no vaccines--including AIDS.

ORAL HEALTH IN AGING RESEARCH AND TRAINING CENTERS

Question. Dr. Löe, in your prepared statement you discuss a new initiative called Oral Health in Aging Research and Training Centers. Can you explain what these centers are?

Answer. The new initiative is part of an Implementation Plan that is the third step in a collaboration involving NIDR, the National Institute on Aging, and the Veterans Administration. The three agencies have already published a Research Agenda on Oral Health in the Elderly, describing areas of research which should be addressed, and a Catalog of Resources, summarizing activities or programs of the agencies that could be drawn upon in developing research plans. Now, to further collaborative research efforts, we are developing a joint Request for Applications (RFA) for Oral Health in Aging Research and Training Centers. These centers would involve VA-supported investigators working with dental

scientists and researchers on aging at academic health centers. The collaborative effort could make use of resources, personnel, and patient populations associated with each of the separate components and would involve co-funding or in-kind support by the three agencies. While we are not limiting the themes that could be addressed, we have singled out nutrition in relation to oral and general health in aging, chronic pain in older people, and research on oral health promotion and disease prevention tailored to the needs of older Americans, as especially ripe for study. We foresee real cost-saving benefits and research progress in this center-like approach--and can pinpoint areas of the country where high-level research is already being supported independently by each of the Federal agencies.

Question. How much are you requesting to fund these centers?

Answer. If funds were available, we would like to support 3 or 4 such centers. We estimate that each center would cost approximately $750,000 with NIDR and NIA sharing equally in the funding, and the VA providing in-kind support.

AIDS RESEARCH

Question. Dr. Löe, How much of your overall budget request is for AIDS-related research?

Answer. The Institute's AIDS-related research budget request for FY 1988 is $2,782,000.

Question. I understand there is interest in using dental research to explore the route of transmission of the virus as well as provide early detection of the virus. What, specifically, will your Institute be doing in AIDS research?

Answer. The AIDS virus has been recovered from saliva, raising the possibility that the disease might be transmitted through salivary contact. NIDR salivary gland researchers are exploring this possibility. Their findings to date suggest that the virus does not appear to be secreted by the salivary glands. Rather, its presence in the so-called "whole saliva" appears to be as a result of contamination of the fluid by blood serum associated with oral and periodontal diseases.

The mouth of AIDS patients is commonly the site of opportunistic infections such as the fungal disease, candidiasis, as well as Kaposi's sarcoma. Because of the failure of the body's defense systems to mount a strong attack, these opportunistic diseases can be severe and even life-threatening if and when they spread to the respiratory or digestive systems. Dental researchers have also observed an oral soft tissue abnormality that appears to be unique to AIDS patients, called hairy leukoplakia. Papilloma, Epstein-Barr and herpes virus infections, severe periodontal diseases, abscesses, and pain associated with nervous system pathology are other oral manifestations documented in AIDS patients.

Current NIDR-supported research on AIDS includes studies of salivary gland and other oral tissue changes during the natural

history of the disease. Saliva contains numerous defense factors, including anti-bacterial and anti-fungal components, immunoglobins and other molecules that defend against disease and maintain the health of the oral tissues. It is possible that changes in the quality or quantity of salivary components may precede overt signs and symptoms of AIDS and thus serve as an early warning system indicating that a patient at risk may develop frank AIDS. Accordingly, we are now studying AIDS-positive individuals and those in early stages of disease in several epidemiological longitudinal studies conducted in collaboration with other Federal agencies. Other investigators are characterizing the specific defense factors present in saliva and exploring new means of prevention or treatment of oral infections. For example, NIDR staff scientists are modifying an intra-oral device for the slow release of anti-fungal drugs. Use of an antibacterial mouth rinse is also under study. NIDR pain specialists are testing drugs to treat painful neuropathies in AIDS patients.

In addition to these clinical and epidemiological studies, NIDR immunologists are studying how AIDS disrupts the normal functioning of certain immune cells--monocytes and B-lymphocytes. Monocytes can be infected by the AIDS virus as well as by cytomegalovirus, another virus that can cause serious infection in AIDS patients. Infected monccytes lose much of their capacity to detect and destroy pathogens and because they are not killed by the AIDS virus may serve as a reservoir and conduit for the virus in spreading to various parts of the body. As well as determining the affects of AIDS infection on these cells, NIDR staff scientists are working to develop ways to eradicate the virus and enhance the immune defense system of AIDS patients. One method under study makes use of a new technique for making human monoclonal antibodies which could be targeted to the AIDS virus.

PREVENTION RESEARCH

Question. Dr. Löe, how much of your budget is devoted to prevention activities?

Answer. In FY 1987 NIDR will devote approximately $24.6 million, or 20.9 percent of its budget to prevention activities.

Question. What sorts of prevention activities is the Institute conducting?

Answer. Dental research has moved increasingly into areas of prevention, led by advances in our understanding of the principal dental disease, dental caries and the periodontal diseases. Today we have an extensive portfolio of prevention-related activities ranging from basic and epidemiologic research to the transfer of research findings to scientists, healthcare providers, and the general public. Examples of these activities include:

.Research to develop new preventive measures, such as vaccines against herpes simplex virus infections and dental caries and antibacterial and antiplaque agents to prevent dental caries and the initiation of periodontal diseases.

.The conducting of field trials and demonstration programs

to measure the efficacy and cost-effectiveness of preventive interventions, such as the combined use of dental sealants and self-applied fluorides to prevent dental caries.

.Continued studies to elucidate the causes of oral diseases (microbiology, genetic susceptibility, diet, lifestyle, other risk factors).

.Development of behavioral interventions aimed at encouraging appropriate oral hygiene practices and the acceptance and maintenance of preventive procedures by children and adults.

.AIDS research focusing on changes in saliva or oral tissues that may precede frank AIDS and may allow early interventions to forestall opportunistic infections.

.Research to develop and test nonpharmacological approaches to overcoming excessive dental fear and anxiety which may prevent individuals from seeking regular dental care.

.The development of educational materials to help transfer research results to health care providers and the general public. These include films, brochures, posters, exhibits and lectures for the public and health professionals, as well as professional symposia and workshops whose proceedings are widely disseminated.

CLINICAL TRIALS

Question. How many clinical trials will you fund in FY87?

Answer. The NIDR will fund eight clinical trials in FY 1987.

Question. How many are ready to be funded in FY88?

Answer. At the present time, the Institute has three clinical trials ready for funding in FY 1988.

Question. How many will you fund under your current budget proposal?

Answer. Under the current budget proposal NIDR will not fund any new clinical trials in FY 1988.

Question. Specifically, which ones would not be funded?

Answer. The following clinical trials would not be funded: Diabetes Control and Complications Trial--Ancillary Study of Periodontal Complications; Evaluation of the Anti-caries Effectiveness among Pre-school Age Children of a Dentifrice with Less-than-usual Fluoride Concentration; and Evaluation of Pit-and-Fissure Sealants to Treat Small Caries Lesions.

CYSTIC FIBROSIS

Question. What advances have there been over the last year in understanding and treating cystic fibrosis?

Answer. The National Heart, Lung, and Blood Institute continues to expend significant research effort on cystic fibrosis, the most common lethal childhood genetic disease in white Americans. This research has made impressive progress on two fronts. The first is in studies directed at localizing and characterizing the gene that causes cystic fibrosis. During the past year, the localization of the gene on the specific region of chromosome 7 has become better focused, and more closely linked biochemical markers of the gene have been identified. Based on the pace of this progress, one can be optimistic that the gene itself will be characterized and its biochemical product identified in the not too distant future. Once the gene is characterized, more direct therapeutic interventions than those currently available may well be available for cystic fibrosis.

The second area of research which has recorded significant progress during the past year is related to the specific cellular aberration and mechanisms leading to salty sweat; a manifestation of electrochemical abnormality in cystic fibrosis. Investigators supported by the Institute have shown that specific gates or channels located on certain cells, which permit the normal movement of chloride ions in and out of cells, are not functioning normally in cystic fibrosis patients. Chloride ions, together with sodium ions, make up salt and this defect in chloride transport in cystic fibrosis patients results in elevated levels of salt in their sweat and thickening of mucus. The precise reasons for the malfunction of the chloride channel are not yet clear, and the NHLBI has recently initiated a program to study the role of ion channels in cystic fibrosis and other pulmonary diseases. We are hopeful that the knowledge generated from this effort will provide new approaches to the treatment of cystic fibrosis.

NEONATAL RESPIRATORY DISTRESS SYNDROME

Question. Dr. Lenfant, has there been any new progress over the last year in the treatment of neonatal respiratory distress syndrome?

Answer. Over the last few years there has been dramatic progress in the treatment of neonatal respiratory distress syndrome, especially in premature infants. Neonatal respiratory distress syndrome is a condition in which the infant's lungs have not developed sufficiently prior to birth, and cannot process enough oxygen for the baby's needs. The underlying cause of this ailment is believed to be a deficiency of the pulmonary surfactant, which is vital for life. Two types of surfactant material have been developed and are being tested for possible surfactant replacement therapy.

Question. Where did this advance in therapy come from?

Answer. This advance in therapy comes from different sources, including our Specialized Centers of Research. One type of surfactant therapy, an artificial surfactant, has been successfully manufactured by the Burroughs-Welcome pharmaceutical company and is being tested in one of our pediatric pulmonary centers. A second type of surfactant, which is being used at the

University of California, is obtained by purifying the amniotic fluid taken from women who gave birth by Caesarian section.

It is impossible to predict how long it will take to evaluate these new preparations; it is clear, however, that a number of excellent laboratories are working very hard and are eager to see a successful treatment available for these babies who are born with premature lungs and who develop respiratory distress syndrome.

SICKLE CELL DISEASE AND COOLEY'S ANEMIA

Question. Dr. Lenfant, what can you tell us about advances in understanding sickle cell disease and Cooley's anemia?

Answer. Significant progress has been achieved in our knowledge about sickle cell disease and Cooley's anemia at all levels of scientific investigation. We continue to learn more about the molecular mechanisms controlling gene expression which will ultimately contribute to effective therapeutic approaches to these disorders. For example, a normal human beta-globin gene can now be successfully introduced into the mouse model for Cooley's anemia. Although expression of the normal gene is low, the results are very encouraging leading investigators to hope that eventually analogous studies in humans with hemoglobin disorders can influence the disease at the gene level.

The prospective study on the clinical course of sickle cell disease has clarified much of the previously anecdotal information on the clinical manifestations of that disorder and provides a more accurate framework for the assessment of therapeutic interventions. New findings in the areas of growth and development, splenic function and the prevention of early infections in children with sickle cell disease have led to improvement in care and decreased morbidity and mortality in this patient population.

RESEARCH CENTERS

Question. What impact will the President's FY 88 Budget request have on your Institute's research centers?

Answer. The President's Budget proposes a small increase over the FY 87 appropriation amount for research centers for an AIDS related project.

Question. Have you planned to fund centers you will now be unable to fund?

Answer. The President's Budget will permit us to fund 60 centers, the same number as we funded in FY 87. The 10 Sickle Cell Disease Centers are scheduled for renewal in FY 88 and there are sufficient funds available to fund them at their current levels.

Question. Will the centers be funded at their fully recommended levels?

Answer. We estimate that we will need to negotiate

reductions of approximately seven percent from committed levels for noncompeting centers, and seven percent from study section recommended levels for competing centers.

SINGLE NIH APPORTIONMENT

Question. Dr. Lenfant, what kind of flexibility do you have over your budget?

Answer. Our appropriation is divided into several cost categories. Within these cost categories, the Institute can decide which approved grants are funded, which contract programs are funded and so forth. Some of these cost categories, together with reprogramming guidelines, have been used as parameters and have controlled our actions for years. These categories are the Heart and Vascular Diseases Program, the Lung Diseases Program, the Blood Diseases and Resources Program, the Intramural Research Program, Research Management and Support, and Construction. In August of 1985, the Office of Management and Budget consolidated seventeen separate apportionments at the National Institutes of Health (NIH) into one apportionment. This one apportionment established several new control categories such as the number and amount for new and competing research project grants, the number and amount for noncompeting research grants, the number and amount for noncompeting research centers and so forth. The NIH, in turn, added these categories to our allotment. These additional categories reduce my flexibility to move funds without first obtaining the approval of the NIH, and, possibly, the Office of Management and Budget.

Question. Are you able to transfer funds within accounts to respond to unanticipated research needs?

Answer. Although the process itself is a complicated and time consuming one, any changes I have requested have been approved.

Question. Would more flexibility compromise your ability to award the total number of grants Congress traditionally mandates in the appropriations bill?

Answer. No, I do not think greater flexibility would affect the Institute's ability to award an assigned number of grants.

CLINICAL TRIALS

Question. How many clinical trials will you fund in FY 1987?

Answer. There are 18 major clinical trials under way in FY 1987; seven of which are new. The new trials beginning in FY 1987 are: Post-Coronary Artery Bypass, Dietary Intervention in children with Elevated Low Density Lipoproteins, Bypass Angioplasty Revascularization Investigation, Postmenopausal Estrogen/Progestin Intervention, Children's Activity Trial of Cardiovascular Health, Penicillin Prophylaxis in Sickle Cell Disease, and Hydroxyurea in Patients with Sickle Cell Disease.

Question. How many are ready to be funded in FY 1988?

Answer. The Institute does not plan to start any new trials under the current FY 1988 budget request; however if additional funds were available, there are trials ready to begin. These projects are: Treatment of Pulmonary Embolism; Cholesterol Lowering in Older Men and Woman; Membrane-Active Agents to Prevent Sickle Cell Disease; Therapy in Patients with Peripheral Arterial Disease; Pharmacologic Intervention in Adult Respiratory Distress Syndrome; Alcohol Restriction in Treatment for Hypertension; Treatment of Idiopathic Fibrotic Lung Disease; Digitalis and Congestive Heart Failure; and Continuous Positive Airway Pressure for Treatment of Sleep Apnea.

FY 1988 PRESIDENT'S BUDGET PROPOSALS

Question. Does your budget request include out-year funds to level fund research project grants?

Answer. The President's Budget includes $452,500,000 for the future year cost of FY 88 competing research project grants awards.

Question. What is your request without these funds?

Answer. Including $56,603,000 appropriated in FY 87 and proposed for continued availability in FY 88, the Institute's request is $878,490,000. The request for new budget authority is $821,887,000.

Question. How much is cut in FY 87 as part of your FY 88 request?

Answer. The President's Budget proposes to extend the availability of $56,603,000 in FY 87 budget authority to FY 88.

Question. What was your original budget request for FY 88?

Answer. The Institute requested $1,125,635,000 from the NIH in its first budget submission for FY 88.

Question. Dr. Lenfant, in your budget justification you state, "Together, all cardiovascular, lung and blood diseases accounted for more than 1 million deaths in 1985, or 56 percent of all deaths, and $143.3 billion in economic costs in 1984, or 24 percent of the total economic costs of illness and premature death." Given these astronomical health care costs, does it make sense, in your professional judgment, to cut the 1987 and 1988 research budgets for these diseases?

Answer. In my professional judgment, these reductions are not appropriate. However, the President, the Office of Management and Budget, and the Secretary have other factors to consider in making budget decisions.

AIDS

Question. Dr. Lenfant, what is the status of blood screening for AIDS?

Answer. In March 1983, the U.S. Public Health Service (PHS) recommended that members of groups at increased risk for acquired immunodeficiency syndrome (AIDS) refrain from donating blood and/or plasma. In March 1985, the first commercial enzyme immunoassay (EIA) kits to detect antibodies to human immunodeficiency virus (HIV) were licensed by the Food and Drug Administration. Immediately thereafter, virtually all blood collecting facilities throughout the country initiated voluntary screening of donated blood for antibody to HIV. Today, donor screening strategies consist of obtaining medical histories, providing high-risk donors with opportunities to self-defer and HIV antibody screening. These approaches have almost completely eliminated the transmission of HIV by blood and blood components. Recently, the Centers for Disease Control also issued recommendations that HIV-antibody testing be made available to persons who received blood transfusions between 1978 and late Spring of 1985, when universal testing of blood donors was implemented.

Question. How effective are our screening procedures?

Answer. Blood donor screening procedures have been extremely effective in improving the safety of the U.S. blood supply. According to data obtained from the American Red Cross, the prevalence of antibody to HIV in the Red Cross donor population is only 0.013%. Current HIV-antibody screening procedures detect 99% or more of positive donors. Accordingly, of the 12 million units of blood collected in this country each year, it is calculated that only about 16 positive units would be missed by current antibody screening procedures. The National Heart, Lung, and Blood Institute is supporting studies to develop and evaluate second- and third-generation assays to detect HIV, antibodies to HIV or components of the virus that should improve our ability to detect contaminated blood and thereby reduce, even further, the number of units escaping detection.

Question. In your professional judgment, are we spending enough on AIDS blood screening activities?

Answer. Since 1983, the National Heart, Lung, and Blood Institute has been supporting studies on the development and evaluation of screening procedures to detect HIV. The Institute currently supports nine major research contracts with universities and private industry to develop and evaluate blood screening procedures to detect HIV, antibody to HIV or components of the virus. Also, the effectiveness of current HIV-antibody screening procedures are being evaluated in large groups of blood donors and blood recipients. During this fiscal year, the Institute will provide $4.7 million for these activities and plans to expend an additional $22.3 million on this program over the next four years. We believe that this commitment is sufficient to fulfill the research objectives of this program and ultimately to improve the safety of the Nation's blood supply.

Question. Dr. Lenfant, you indicate in your prepared statement that the Heart, Lung, and Blood Institute is planning a national AIDS education effort to ensure: 1) an educated pool of healthy blood donors, and 2) a delivery system that uses donor blood only when absolutely necessary. What activities are you planning in this effort?

Answer. The Institute, in conjunction with major professional and voluntary organizations representing donors, blood centers and hospitals, and health care professionals, will develop a major national education effort to promote an adequate and safe supply of blood and to enhance a more effective and economical utilization of blood and blood products. This national effort will be based on the models of the National High Blood Pressure Education Program and the National Cholesterol Education Program which are administered and coordinated by the Institute. Building on the substantial activities of the American Red Cross, the American Association of Blood Banks, the Council of Community Blood Centers, and individual blood centers around the country, a collaborative mass media campaign employing both electronic and print media will be launched to reach the public with messages to motivate them to donate blood and to allay unfounded fears regarding transfusion, donation, and AIDS. An effort to promote autologous donation as a means of increasing the blood supply and assuring safety may be among the initial thrusts of the program. In addition to the public service message efforts for radio, television, and print media, there will be the production of widely disseminated informational brochures and publications. Also to be developed is an information center to handle the numerous inquiries that will be generated. Using the knowledge and experience of transfusion medicine experts affiliated with major professional societies and with the expertise available within the Institute, a professional education program will be launched to increase the knowledge of medical students and health care practitioners concerning the benefits of autologous transfusion and appropriate use of blood products. Guidelines and criteria for use of blood products for specific medical conditions, eligibility criteria for autologous donation, and networks for consultation with transfusion medicine experts will be developed.

Question. How much have you requested for this in your FY 1988 request?

Answer. The Institute estimates this program will cost $2.2 million in FY 1988.

AIDS FUNDING

Question. Dr. Lenfant, have other research activities in your Institute been cut back to accommodate the increased emphasis on AIDS research?

Answer. The changing nature of science requires continued assessment of existing resource allocations to ensure that high priority areas receive sufficient support. Since AIDS is the Department's number one priority, we need to direct funds to AIDS research.

Question. Specifically, what has been cut?

Answer. Our budget levels have increased in recent years so I cannot say that other areas have been cut. What has happened in our Institute is that increases needed for AIDS have taken priority over other areas in the allocation of these additional funds. In other words, if AIDS were not a factor in allocation

decisions, other research areas may have received larger increases.

CHOLESTEROL

Question. Dr. Lenfant, in your prepared testimony, you talk about new developments in new cholesterol-lowering compounds. Would you please highlight these developments for the committee?

Answer. A new class of cholesterol-lowering agents, the 3-hydroxymethylglutaryl coenzyme A (HMG CoA) reductase inhibitors, has been developed. These drugs offer substantial advantages over currently available drugs, in that they are easily administered, effective, and have few known side effects. While other cholesterol-lowering drugs are poorly tolerated by many patients, and only partially effective in others, the HMG CoA reductase inhibitors offer the potential to normalize blood cholesterol levels in the great majority of patients whose cholesterol levels are not adequately controlled by diet. The first of these new drugs, Lovastatin, is under consideration for general release by the Food and Drug Administration and could be available by prescription before the end of 1987. Several other HMG CoA reductase inhibitors are under active development and could become available in 1988 or 1989.

Question. Has basic research contributed to your ability to conduct the clinical studies you refer to in your statement? How so?

Answer. Basic research has played a major role in the development of the 3-hydroxymethylglutaryl coenzyme A (HMG CoA) reductase inhibitors. These drugs act primarily by blocking the synthesis of cholesterol in the liver. Since the liver requires cholesterol to perform several important metabolic functions, it reacts by making more of the specialized low-density lipoprotein (LDL) receptors that recapture cholesterol from the circulating blood. The net result is a fall in blood cholesterol levels.

Our understanding of the role of LDL receptors in cholesterol metabolism and in human disease has come from basic research, notably the research of Drs. Michael Brown and Joseph Goldstein, awarded the 1985 Nobel Prize in Medicine. This research encouraged the development of drugs like the HMG CoA reductase inhibitors, which stimulate the production of LDL receptors, and has increased our sophistication in using these and other drugs in patients with specific genetic defects in cholesterol metabolism. This collaboration of basic and applied research has led to a much improved outlook for patients with high blood cholesterol levels.

BUDGET REQUEST

Question. Does your budget request include out-year funds to level fund research project grants? What is your request without those funds? How much is cut in FY 1987 as part of your FY 1988 request? What was your original budget request for FY 1988?

Answer. Our request includes additional budget authority of $327,084,000 to pay the future commitments of all competing research project grants to be awarded in FY 1988. Aside from this

money, our request for new budget authority to be obligated during FY 1988 is $440,504,000. The FY 1988 Request includes an additional $35,387,000 in FY 1987 funds which are proposed to be carried over into 1988 for obligation. Our request would therefore result in $475,891,000 in obligations in FY 1988.

The requested carryover of $35,387,000 in 1987 funds would reduce the number of competing research project grant awards from the 1987 appropriation level by 77. Downward negotiations of approximately 19.5 and 17.4 percent from committed or recommended levels would be required for noncompeting continuations and competing research project grants, respectively.

During development of the NIH Preliminary Budget, NIDDK requested $591,056,000. This professional judgement request was designed to fund fully all research project grants and centers, to increase the number of competing awards to 850, and to make moderate increases above current levels in most other areas of the Institute.

JUVENILE DIABETES

Question. Dr. Gorden, how much of your diabetes research budget is devoted to research on juvenile diabetes? Do you coordinate your efforts with the Institute of Child Health and Human Development?

Answer. Approximately 15 percent or about $8.5 million of our diabetes research budget is expended to fund researchers who are studying questions specifically related to insulin-dependent -- IDDM, Type I, formerly called juvenile-onset diabetes. However, this estimate does not include support for research that is relevant to all forms of diabetes, such as on the long-term complications of diabetes, the Diabetes Control and Complications Trial, and an unknown fraction of Diabetes Centers support which is generic to all of diabetes research. Therefore, it is impossible to precisely allocate our support to Type I diabetes but at least one-half of our expenditures impact on important research questions of relevance to this form of diabetes.

The NIDDK and NICHD are active members of the Diabetes Mellitus Interagency Coordinating Committee (DMICC) which is the focus for coordination of all federal agency activities related to diabetes. The NIDDK and NICHD have defined our respective scientific interests in order to avoid duplication of effort or inadvertent neglect of any area of investigation. The intramural and extramural staffs of the two Institutes collaborate when appropriate and they have many productive interactions which I expect to continue.

DIABETES CONTROL AND COMPLICATIONS TRIAL

Question. I understand you are currently conducting a diabetes control and complications trial. Can you describe this trial and the importance its findings can have for the treatment of diabetes? How much is included in this year's budget for this trial? How much will you spend in FY 1988? Will other research activities be cut or frozen to accommodate this program?

Answer. One of the major unanswered questions in the treatment of diabetes is whether very "tight" control of blood sugar will prevent the devastating long-term complications of diabetes. There is suggestive evidence from laboratory animal studies and short-term, small-scale human trials that intensive insulin therapy might abort the development of diabetic eye, kidney and nerve disease. However, any enthusiasm for a generalization of this form of therapy has to be tempered by the costs of this therapy (highly regulated lifestyle as well as economic costs) and risks inherent to this therapy (inevitable increase in the occurrence of periodic low blood sugar which is potentially life-threatening). Therefore, NIH embarked upon a large-scale multicenter collaborative human trial to definitively establish and compare the benefits and risks of tight blood glucose control.

The Diabetes Control and Complication Trial (DCCT) is now in the full-scale trial phase after successfully demonstrating feasibility to the satisfaction of two independent review groups in a prior short-term smaller study phase. We will be recruiting a total of 1400 patients, who will be randomly assigned to either intensive or conventional insulin therapy at 27 centers around the country.

At this moment, more than 700 subjects have entered the study, and we anticipate completing this trial on schedule in the early 1990s. While we await the ultimate cure or preventative for diabetes, the prevention of diabetic complications is perhaps the most essential goal of therapy. The results of the DCCT should have a major impact on how patients are treated.

The NIDDK budget to support the DCCT for FY 1987 is approximately $17 million, and the FY 1988 amount is estimated to be about the same. We do not anticipate exceeding $17 million to fully carry on the study in FY 1988, and will therefore not require any cut or freeze in other planned research activities of the NIDDK.

GALLSTONES

Question. Dr. Gorden, I understand your institute is studying a method for dissolving gallstones without surgery. What is this new method and have you estimated what kind of savings can be achieved with such an alternative to surgery?

Answer. The new experimental method by which cholesterol gallbladder stones are being dissolved using methyltertiary-butyl ether (MBTE) may provide some cost savings over conventional cholecystectomy. However, its great virtue at the present time is that it can be a life-saving measure in patients who are at extremely high risk for surgery. This is the group of patients upon whom the procedure is currently being tested. Potentially, if the experience on this group of patients continues to be good, then the procedure may be used on others. The patient needs to be in the hospital only two or three days, but because of the need for intensive medical supervision, the total medical cost of the procedure may be about equal to the cost of a cholecystectomy for which hospitalization may be about seven days. However a cost savings does occur because of a more rapid return to gainful

employment. The MBTE patient can return to work within a week, while the cholecystectomy patient must wait three or four weeks.

DIGESTIVE DISEASES RESEARCH

Question. Dr. Gorden, in your prepared statement you indicate that diseases of the digestive tract are the leading cause of hospitalization and major surgery in the U.S., costing tens of billions of dollars for medical care. How much does your budget request include for research in digestive diseases? How much will be cut in 1987 under the President's request?

Answer. Our FY 1988 Request includes about $86,100,000 in both the 1987 Revised Estimate and the 1988 Request for all mechanisms of research support in the field of digestive diseases research. NIDDK's actual 1986 support was $79,249,000. The 1987 Appropriation provided about $92,500,000 for the digestive diseases research program, so the revised 1987 Estimate level represents a proposed cut of about $6,400,000.

Question. In your professional judgment, is it wise to be cutting the 1987 and 1988 budgets for research in diabetes, digestive and kidney diseases when the health care costs for these diseases are so high?

Answer. During this time of budgetary restrictions, we have been able to provide continued support in all our research areas, as well as to begin to explore new research directions, such as the study of kidney disease of diabetes, an area of vital importance to public health. We have succeeded, and hope to have additional success, in reducing health care costs and other tremendous disease-associated burdens that affect millions of American patients and their families. At the same time, it is certainly true that the diseases for which NIDDK bears research responsibility are some of the most debilitating and costly of the health problems affecting Americans and that vigorous research programs to combat these diseases are warranted.

INHIBIN FAMILY

Question. Dr. Gorden, I understand that this year NIDDK-supported scientists have discovered a new family of peptides. Can you tell us about this discovery and its importance to our understanding of endocrine disorders?

Answer. It was realized long ago that a hormone important to reproduction, follicle stimulating hormone, was regulated by another hormone, which until recently, was unknown to scientists. NIDDK-grantees have now successfully isolated that peptide hormone, called inhibin. As they were purifying the molecule, researchers noted that some fractions caused the hormone to be released, while others caused it to be inhibited. These investigators have now fully characterized both forms of these new peptide hormones, one that promotes follicle stimulating hormone release and another which inhibits it. This research on the inhibin family could have a major impact in the areas of fertility and contraception.

INTERSTITIAL CYSTITIS

Question. Dr. Gorden, last year this subcommittee heard testimony about the painful, debilitating symptoms of interstitial cystitis. What are you currently doing to study this illness? Do you have plans to continue your efforts in FY 1988?

Answer. NIDDK is taking a number of positive steps to establish a quality research program on interstitial cystitis, including: (1) meeting with experts in the field in August and again in October 1986, concerning the needs in interstitial cystitis research and how best to address them; (2) issuing a request for research grant applications, indicating the Institute's interest in supporting scientifically meritorious research on the urinary tract, specifically including diseases such as interstitial cystitis; (3) arranging for a workshop to be held in August 1987, cochaired by Dr. Vicki Ratner of the Interstitial Cystitis Association and by Dr. Alan Wein of the University of Pennsylvania, to help develop diagnostic criteria and to stimulate and guide research; (4) supporting a professional services contract to construct a computer file and to analyze the results of questionnaires sent by the New York chapter of the Interstitial Cystitis Association to its members; (5) advising current grantees of the NIDDK Urology Program, both formally and informally, of the Institute's desire to support promising research on interstitial cystitis; (6) working cooperatively with the leadership and members of the Interstitial Cystitis Association to foster information-sharing and mutual participation in efforts to combat interstitial cystitis; and (7) assisting scientific investigators in resubmitting a grant application on interstitial cystitis. The Institute encouraged the group of investigators involved to revise and resubmit their grant application, taking into consideration the comments from the first review. I am pleased to report that the amended application has received a favorable initial review, and will be reviewed by the Institute's National Advisory Council in the near future.

On March 18, 1987, I will be meeting personally with a group of expert clinicians and representatives of the Interstitial Cystitis Association in an attempt to begin to develop diagnostic criteria for this health problem. Once these criteria are established we can start to collect data on patients, and begin to design approaches for meaningful clinical studies.

We hope to pursue all of these efforts in FY 1988 in order to meet our objective of establishing a quality research program in this important area.

CLINICAL TRIALS

Question. How many clinical trials will you fund in FY 1987? How many are ready to be funded in FY 1988? How many will you fund under your current budget proposal? Specifically, which ones would not be funded?

Answer. We will fund 64 clinical trials in FY 1987, and under the current budget proposal, we will fund 81 clinical trials in FY 1988. This includes one new clinical trial, The Effectiveness of Diet Therapy for Prevention of the Progression of

Renal Disease in Children. If sufficient funds were available in FY 1988 to begin additional new clinical trials, there are eight which could be pursued:

The Effects of Antihypertensive Agents on the Progression of Kidney Disease due to Diabetes Mellitus, Including Their Use in People with Normal Blood Pressure.

Erythropoietin Therapy to Treat Anemia in People with End-Stage Renal Disease.

Diagnostic and Treatment Strategies in Interstitial Cystitis.

Use of Antisecretory Agents in the Treatment of Chronic Secretory Diarrheal Disorders.

Diet and Exercise in the Prevention and Treatment of Noninsulin-Dependent Diabetes Mellitus.

Pharmacologic Prevention of Cholesterol Gallstones During Rapid Weight Loss.

Growth Hormone Releasing Factor Therapy Versus Growth Hormone Therapy in Children with Growth Hormone Deficiency.

The Optimization of Kidney Transplantation Outcomes in Children with End-Stage Renal Disease.

FY 1988 BUDGET

Question. Does your budget request include outyear funds to level fund research project grants?

Answer. To ensure a stable source of funds for research project grants, the FY 1988 President's Budget requests the extended availability of $10,990,000 from FY 1987 NIA funds. These are competing research project grant funds transferred from FY 1987 to FY 1988.

Question. What is your request without those funds?

Answer. If these funds are excluded, the FY 1988 request is $156,174,000.

Question. How much is cut in FY87 as part of your FY88 request?

Answer. The reduction in FY 1987 is $10,990,000.

Question. What was your original budget request for FY 1988?

Answer. The original NIA request to NIH was $212,016,000.

Question. Dr. Williams, last year you informed this subcommittee that by the year 2020 we will have approximately twice as many people over the age of 65. There will be twice as many over 85 by the year 2000. Yet, in the face of these statistics the President proposes to cut the dollars for aging programs throughout

his entire budget. Aging research in the Department's Office of Human Development services is cut $12.5 million; funds provided for a geriatric initiative in the Health Resources and Services Administration are cut $5.8 million below the 1987 appropriated level; and now, the President's Budget would cut the FY87 funds for the National Institute on Aging by nearly $10 million dollars.

Dr. Williams, in your professional judgment, should we be cutting aging research funds given what we know about our aging population?

Answer. In my professional judgment, we clearly have more promising applications to make advances in research related to aging than we will be able to support. Nonetheless, health research, including aging research, is only one among many national priorities and must be balanced against other national needs.

Question. How would the proposed $10 million cut be absorbed in your Institute?

Answer. The entire amount of the extended availability funds would be transferred from the FY 1987 research project grants line. Of the total, $4,187,000 is associated with a reduction of competing research project grants from the 199 awards contained in the FY 1987 Appropriation to 173 in the Current Estimate. The remaining $6,083,000 will be absorbed by downward negotiations in both competing and noncompeting research project grants.

Question. If Congress does not agree to delay 87 money into 1988, the President's Budget would cut your Institute by more than $20 million dollars. How would you absorb this cut?

Answer. The entire carryover amount of $10,990,000 is included in the FY 1988 competing research project grants line. If the proposed carryover were denied, the number of competing grants which could be funded under the President's Budget would drop from 193 to approximately 78. While high priority areas such as Alzheimer disease, osteoporosis, and training would be protected to the degree possible, the overall decrease of $20.8 million from FY 1987 to FY 1988 would result in a general decrease in the amount of research supported.

ALZHEIMER DISEASE BREAKTHROUGHS

Question. Dr. Williams, we have all read about the recent discovery of a gene that appears to cause Alzheimer's disease. Can you bring us up-to-date on this discovery?

Answer. There appears to be a subgroup of Alzheimer disease that is familial and is presumed autosomal dominant with incomplete penetrance. In the autosomal dominant families, AD tends to occur at a substantially earlier age. Estimates of the proportion of familial AD cases range from 5 to 90 percent, but are typically estimated to be about 30 percent of all AD cases.

Using genetic linkage analysis with DNA markers in four large AD kindreds, Dr. Peter St. George-Hyslop and co-workers at the NIA-supported Massachusetts Alzheimer Disease Research Center (ADRC) has associated a small region of chromosome 21 with AD. Within this

same region, they have also localized the amyloid beta peptide gene. The association between chromosome 21 and AD strengthens the apparent relationship between Down's Syndrome (DS) and AD since there is a high incidence of AD-like neuropathology in older DS patients. Furthermore, DS results from an extra gene region on chromosome 21 which overlaps the amyloid gene

Pathognomonic for AD is the presence of amyloid plaques and neurofibrillary tangles within the hippocampus and temporal and forebrain cortex. The DNA encoding this amyloid also has been isolated, cloned, characterized, and located on the same region of chromosome 21 by Dr. Dmitry Goldgaber of the National Institute of Neurological and Communicative Disorders and Stroke Intramural Program and by Dr. Nikolaos Robakis at the New York State Institute for Basic Research under grant support by the NIA. This gene has been detected not only in AD patients but in several other species of aged mammals by another NIA grantee, Dr. Dennis Selkoe, in association with investigators from the Johns Hopkins ADRC.

In this rapidly developing field, as recently as March 13th Dr. Jean Delabar and colleagues including Dr. Dmitry Goldgaber found that non-familial Alzheimer and Down's syndrome patients have an extra copy of the gene that makes amyloid protein. This study strengthens the evidence for a genetic defect in Alzheimer disease and may explain the long suspected link between AD and Down's syndrome. The excess number of amyloid genes in Alzheimer and Down's patients could conceivably be responsible for the increased neurofibrillary plaques with their associated amyloid seen in the brains of these patients.

Whether the amyloid gene and the familial AD are the same or only in close proximity remains to be established. These studies, however, will be instrumental in stimulating further research on the molecular genetics of AD, on the molecular identification of a potential gene locus involved in the etiology of AD, and on the potential of the use of a genetic marker for those at risk for AD along the lines of the development of a gene marker for Huntington's disease, another inherited neurodegenerative disorder. Should a specific AD gene be identified and characterized, then there is the potential for the development of therapy based upon correction of the gene defect.

The molecular genetics of AD is an area that offers much to the understanding, diagnosis, and potential treatment of AD. It is an area that needs to receive continued support and high priority within the NIA's programs. To approach this end, the Institute is developing a Request for Application (RFA) on the molecular genetics of familial AD.

ALZHEIMER DISEASE PATIENT REGISTRY

Question. Dr. Williams, What is the status of the Alzheimer disease patient registry?

Answer. The six Alzheimer Disease Patient Registries were funded in September of 1986 to implement the intent of Congress. They are meeting their goal of developing and refining diagnostic procedures, criteria and instruments, and of addressing the methodological issues necessary before attempts are made to

implement a national registry. One coordinating meeting of the Registry Directors has already been held. A second is scheduled for the end of April. Throughout the duration of the awards one or more meetings of the Registry Directors and the NIA staff will be held annually. To expand and complement the efforts of the Registries, Program Announcements have been issued to stimulate work on diagnosis and early detection of AD and on the development of standardized and validated diagnostic criteria for use in international and cross cultural studies.

Question. Will this registry continue to be funded in FY88?

Answer. The six registries were first funded in FY 1986 and thus are in the first of 3 years of funding. The NIA plans to continue them in FY 1988.

ALZHEIMER DISEASE RESEARCH CENTERS

Question. Dr. Williams, your prepared statement indicates that the Alzheimer's Disease Research Centers can provide a rapid and efficient tool for the testing of promising new drugs, and that the availability of these centers has considerably reduced the time required to organize a clinical trial. How much was included in last year's budget for these centers?

Answer. In FY 1986 we spent slightly more than $9.3 million on the Alzheimer Disease Research Centers. The figure for FY 1987, excluding the cost of the THA clinical trial we plan to implement in June, is approximately $9.9 million.

Question. How much is included in the President's Request?

Answer. Based on the FY 1988 Request, the Alzheimer Centers will be funded at approximately $10.3 million. This is about $400,000 above the FY 1987 level.

Question. Will these centers be fully funded?

Answer. The THA clinical trial we are initiating this year developed from an unanticipated breakthrough in Alzheimer disease research which occurred after the President's Budget was developed. Therefore, no allowance was made for the support of this trial in FY 1988. We have also now received competing supplemental requests for additional funds from eight of the ten centers. Outyear costs of these competing awards, should they be made, also are not provided for in FY 1988.

GERIATRIC TRAINING

Question. Dr. Williams, as you know, I have been very concerned about the lack of trained medical professionals in the area of geriatrics. For two years in a row Congress has funded, at my request, a geriatric training initiative in the health resources and services administration. What is the National Institute on Aging doing in this area. Can you suggest other ways we might be preparing to care for our elderly populations?

Answer. In 1984, the NIA chaired the study and report on Education and Training in Geriatrics and Gerontology. That reports

states that faculty members with special preparation in aging are in very short supply, ranging from 5 to 25 percent of the number required in different fields. Thus, more than a doubling of the output of well-prepared faculty would be required to meet the goals by the year 2000.

In the spring of 1986, the Institute of Medicine of the National Academy of Sciences (IOM), in cooperation with NIA and the Hartford Foundation, sponsored the Workshop on Leadership for Geriatric Medicine which addressed this shortage and innovative approaches for physician education and training. It is my understanding that the recommendations from this Workshop are expected to be available in mid-April 1987.

More recently, the NIA co-chaired the study of Personnel for Health Needs of the Elderly as called for in Section 8 of Public Law 99-158. This study addresses the adequacy and availability of a wide range of personnel to meet the health needs of the elderly population through the year 2020, as well necessary changes in Medicare and other third party health care financing programs to support training of primary care physicians, other physicians and other personnel in the care of the elderly. A draft of the report to Congress is currently being cleared through the Department (HHS).

The aforementioned activities were conducted in cooperation with other agencies including HRSA, AoA, HCFA, NIMH, and the VA.

As to the direct support of training in geriatrics and gerontology by NIA alone, the Institute's training budget rose from $6 million in FY 1983 to $14.1 in FY 1987. The President's budget request for FY 1988 is $13.6. The increase since FY 1984 has enabled NIA to fund two new types of training programs-- 7 Complementary Research Training Grants and 16 CoFunding of Research Training Slots. In addition, six new Physician Scientist Awards as well as six new Geriatric Leadership Academic Awards were funded since FY 1984.

The IOM Report of the Workshop on Geriatric Leadership and the Report to Congress on Personnel for Health Needs of the Elderly Through the Year 2020 are expected to discuss other ways to prepare for adequate health care of our increasing population of older persons.

OSTEOPOROSIS RESEARCH

Question. Dr. Williams, how much will you spend this year on osteoporosis research?

Answer. We expect to spend a little over $6 million on osteoporosis research in FY 1987.

Question. How much is proposed under the President's Request?

Answer. Estimated expenditures in FY 1988 under the President's Budget are about $5.6 million.

Question. Have there been any recent developments in osteoporosis research?

Answer. Recent research provides more and more confirmation that estrogen replacement is an effective treatment for rapid bone loss, especially from the spine, in women in the years immediately after menopause (Type I osteoporosis). We are trying to minimize the risks and maximize the benefits of estrogen replacement. For example, NIA-supported studies in which estrogen was administered by skin patches rather than in pills have shown that this approach may lessen adverse side effects while still protecting against bone loss. Plans are underway to participate with four other NIH Institutes in a clinical trial on postmenopausal estrogen/progestin interventions beginning in FY 1987.

This progress is heartening, and should lead to fewer painful and disfiguring vertebral fractures. However, the most serious consequences of osteoporosis is hip fracture. To prevent hip fractures and their accompanying morbidity, mortality, and enormous health care costs, we need to learn how to prevent the decline in bone strength in the hip in persons over age 65 (Type II osteoporosis), which leads to the majority of hip fractures.

We do not fully understand why bone loss continues in the later years, but more than the menopause is involved. This is shown by high rates of osteoporosis and hip fracture in men over the age of 80. We do not yet know the best way to prevent this loss, or indeed if any of the available approaches will work, but some NIA-supported research suggests that specific nutritional and exercise strategies may be effective. In FY 1988 and ensuing years the NIA, together with the National Institute of Diabetes and Digestive and Kidney Diseases and the National Institute of Arthritis and Musculoskeletal and Skin Diseases, plans to put more emphasis on this aspect of osteoporosis through support of Programs of Excellence of Research on Osteoporosis and other research grants.

Question. Any in osteoarthritis?

Answer. Progress on this major cause of disability among older people remains disappointingly slow. There have been advances in our knowledge of cartilage and other tissues involved in osteoarthritis. For example, an NIA-supported study has found that these tissues produce substances which stimulate cells to proliferate, and which may be important in both damage and repair of osteoarthritic tissue. However, we still know almost nothing of the causes of the disease, its prevention, or effective treatment.

Research on osteoarthritis is a high NIA priority. NIA and the National Institute of Arthritis and Musculoskeletal and Skin Diseases convened a large research planning conference which produced a comprehensive identification of research needs. The results of this conference were recently published as a major article in the Journal of Rheumatology. The conference stressed the need to understand the role of basic aging processes in the development of osteoarthritis. The NIA and NIAMS plan to issue a joint solicitation for research grant applications on osteoarthritis in FY 1988 and will, depending upon availability of funds, expend up to $1,000,000 each for this initiative.

CLINICAL TRIALS

Question. How many clinical trials will you fund in FY87?

Answer. The NIA co-funds a major clinical trial on Systolic Hypertension in the Elderly with the National Heart, Lung, and Blood Institute, and a clinical trial on urinary incontinence with the National Center for Nursing Research. NIA also supports a small clinical trial on falls and will soon be awarding a major new clinical trial to test the efficacy and safety of tetrahydroaminoacridine (THA) in the treatment of Alzheimer disease. Plans are underway to participate with four other NIH Institutes in a clinical trial on postmenopausal estrogen/progestin interventions beginning in FY 1987. We have also just recently received a proposal for a clinical trial to test the effect of treating asymptomatic urinary tract infections on morbidity and mortality in older women. This proposal is part of a Teaching Nursing Home competing renewal application. It has an excellent priority score and, should funds permit, will be awarded this year.

Question. How many are ready to be funded in FY 1988?

Answer. All six of these clinical trials are either already funded or are ready to be funded in FY 1987. Any which may be deferred from FY 1987, such as the clinical trial on asymptomatic urinary tract infections, would be ready for implementation in FY 1988.

Question. How many will you fund under your current budget proposal?

Answer. At least five of the six will be funded under our current budget proposal. A final funding decision has not yet been made on the clinical trial on asymptomatic urinary tract infections.

Question. Specifically, which ones would not be funded?

Answer. The only clinical trial at this time about which a funding decision is yet to be made is the clinical trial on asymptomatic urinary tract infections.

AIDS

Question. Dr. Wallace, does the Fogarty International Center work with the World Health Organization? If so, how?

Answer. The Fogarty International Center (FIC) maintains close working relationships with the World Health Organization (WHO). The FIC facilitates the participation of NIH scientists in WHO expert committees and panels and at international meetings on research toward prevention and control of infectious and chronic diseases as well as on issues relating to health in general. NIH scientists participated in over a hundred such activities during FY 1986. The FIC is responsible for the placement of WHO Fellows from universities, research institutions and ministries of health worldwide at NIH laboratories for purposes of research and research training; 23 WHO Fellows were at NIH laboratories during FY 1986.

The Director, FIC, has been a member of previous U.S. Delegations to the World Health Assembly (WHA) and will be a member of the U.S. Delegation to the 1987 meeting of the World Health Assembly in Geneva, Switzerland. The FIC is responsible to the U.S. Delegation for the preparation of NIH comments on WHO's policies,

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positions, and plans for research relevant to the work of the research institutes and divisions of the NIH. The FIC prepares similar inputs for U.S. Delegations to the WHO Executive Board meetings when the United States serves as a member, and to the Directing Council and Executive Board meetings of the WHO Regions of the Americas (PAHO) and the Western Pacific. The Director, FIC, has for several years participated in the U.S. Delegation to the PAHO meetings.

The FIC has involved WHO in the planning and implementation of a number of international conferences and symposia related to investigations on the international aspects of biomedical and behavioral research. Specifically, in cooperation with WHO and its Regional Offices, the FIC has sponsored international conferences on the eradication of yaws and other treponematoses, rabies control, tuberculosis, and the problem of antibiotic resistance worldwide. WHO and the U.S. Public Health Service (PHS) are co-sponsors of the upcoming III International Symposium on AIDS, to be held June 1987, in Washington, D.C.

The FIC was designated as a WHO Collaborating Center for Research and Training in Biomedicine in 1982. In cooperation with WHO and PAHO, the FIC is now conducting a study with senior scientists and science administrators in the United States and six Latin American countries (Argentina, Brazil, Costa Rica, Mexico, Peru, Venezuela) to strengthen research throughout the Region of the Americas through international collaboration. The FIC-WHO Collaborating Center is also working with WHO in assessing education and training needs for medical entomologists in research and control of vector-borne diseases. The first phase of this project was completed in the Region of the Americas, and recommendations have been made through PAHO to ministries of health in the four participating countries: Colombia, Ecuador, Guatemala, and Panama. The second phase of the study is currently adapting the project to situations in WHO's Southeast Asia Region. This activity is based on the premise that the contributions of qualified medical entomologists in vector control programs are not well recognized in many countries and that the considerable financial investments in such activities would be maximized by diverting some resources to the education and training of these important professionals.

Question. Have any cooperative efforts been undertaken to look at the AIDS epidemic from an international perspective?

Answer. A number of agencies and departments of the U.S. Government are looking at AIDS from an international perspective. The Public Health Service has an integrated program, and within the NIH itself, all AIDS activities are coordinated. Cooperative efforts exist between various NIH institutes and foreign counterparts, such as the ongoing collaboration with NIAID and the Governments of Belgium and Zaire. The FIC is playing a major role in coordinating the III International Conference and is establishing a new Special International Fellowship Award in AIDS that will allow rapid and immediate international scientific collaboration and enhance the research personnel resource pool in AIDS.

Any global cooperative effort in AIDS is the purview of the World Health Organization. Dr. Halfdan Mahler, Director General of the World Health Organization, announced in November 1986 that the

World Health Organization is committed to international coordination in this regard. Actually, Dr. Jonathan Mann (a PHS epidemiologist) has been named the Responsible Officer for the Global Control Program on AIDS. WHO is preparing to help the national program in some 120 countries with inadequate fiscal resources; further, WHO has established international open virus banks and addressed the problems of international travel and quarantine regarding AIDS, as well as the global demographic and socio-economic impacts. The U.S. Agency for International Development was the first and remains a strong fiscal support for these efforts by WHO.

GORGAS MEMORIAL INSTITUTE

Question. How much does the Gorgas Memorial Institute receive in research grant dollars?

Answer. During FY 1986, the GMI received $536,000 from the National Cancer Institute and the National Institute of Allergy and Infectious Diseases of the NIH, and $279,000 from the U.S. Army and U.S. Navy. These peer-reviewed projects were supported by both grant and contract mechanisms.

Question. Does the Gorgas Memorial Laboratory receive research grants from sources other than the NIH?

Answer. In FY 1986, in addition to the core funding for the GMI administered through the FIC and the $536,000 for peer-reviewed projects from NCI and NIAID of the NIH, the GMI received $279,000 from the U.S. Army and U.S. Navy for grants and contracts. In other years, the GMI has received research support from WHO, PAHO, major universities, and health agencies.

Question. Are there any new reports on tropical medicine research supported by the Gorgas Memorial Institute?

Answer. The Gorgas Memorial Institute of Tropical and Preventive Medicine, Inc., sends an annual report to Congress describing the scientific activities of its programs. The FY 1986 report is currently being submitted.

FTE'S

Question. Dr. Wallace, have we used any of our visiting scientist programs to offset reductions in full-time equivalent staff positions? If so, what impact does this have on our long-term research efforts?

Answer. The Visiting Program is not used to offset reductions in full-time equivalent staff positions. The purpose of the NIH Visiting Program is to provide a mechanism for mutual cooperation between the United States and other countries, and to further the NIH's mission. Visiting Associates and Visiting Scientists require FTE positions. The NIH will always have positions for foreign scientists because they often have the needed scientific expertise, and both the United States and the foreign country benefit. Visiting Fellows are invited to the NIH for postdoctoral research training experience in their chosen fields. They are not "employees" and, therefore, are not replacing FTEs.

SUBCOMMITTEE RECESS

Senator CHILES. The subcommittee will stand in recess until tomorrow morning at 9:30 in SD–192, when we will hear from the Social Security Administration, the Family Support Administration of the Department of Health and Human Services, and we will hear further from NIH tomorrow afternoon at 2:30 in Senate Dirksen 116.

Thank you very much.

[Whereupon, at 3:45 p.m., Tuesday, March 10, the subcommittee was recessed, to reconvene at 9:30 a.m., Wednesday, March 11.]

DEPARTMENTS OF LABOR, HEALTH AND HUMAN SERVICES, AND EDUCATION AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1988

WEDNESDAY, MARCH 11, 1987

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 9:50 a.m., in room SD–192, Dirksen Senate Office Building, Hon. Lawton Chiles (chairman) presiding.

Present: Senators Chiles, Proxmire, Bumpers, Weicker, and Domenici.

DEPARTMENT OF HEALTH AND HUMAN SERVICES

SOCIAL SECURITY ADMINISTRATION

STATEMENT OF DORCAS R. HARDY, COMMISSIONER

ACCOMPANIED BY:

JOHN TROUT, DIRECTOR, DIVISION OF HUMAN SERVICES, BUDGET ANALYSIS, DEPARTMENT OF HEALTH AND HUMAN SERVICES

NELSON J. SABATINI, DEPUTY COMMISSIONER FOR MANAGEMENT AND ASSESSMENT

OPENING STATEMENT OF SENATOR LAWTON CHILES

Senator CHILES. Good morning. This morning we are going to hear from Commissioner Hardy testifying on the fiscal year 1988 budget request from the Social Security Administration. In my view, the Social Security Administration's most urgent and critical problem is the need to modernize its computer system. As is generally known, the Social Security Administration uses outdated systems to carry out its basic activities, such as maintaining almost 280 million Social Security earnings records, issuing Social Security numbers, and providing information to the Department of the Treasury to pay Social Security benefits.

The quality and timeliness of SSA's service to the public depends largely on how well the computer systems operate. It has generally been recognized since the 1970's that the Social Security Administration has experienced recurring computer system inefficiencies and problems, and although attempts to upgrade the system have been made for more than

15 years, these efforts have either failed or resulted in limited improvements or were abandoned or redirected as the commissioners changed.

By 1982 the computer systems were obsolete, were difficult to maintain and were experiencing backlogs and vulnerability to failure. In 1982 the Social Security Administration initiated the systems modernization plan to restore excellence to its computer system.

This morning, I look forward to talking with Commissioner Hardy about the system modernization plan. We just received a General Accounting Office report on how well the plan is working, and we will be releasing that this morning.

I also want to discuss the GAO report that we received earlier this year. This report discussed the new computer software which, when completed, will reduce the errors and delays experienced in changing benefits for people already receiving Social Security. This software was supposed to be ready by 1987. The GAO report indicates we will not see it completed until the mid-1990's.

The administration has basically acknowledged this computer date in its response to GAO's report. I am troubled by these huge delays in correcting existing problems.

Senator Weicker, I would like to call on you for any opening statement you may care to make.

Senator WEICKER. I have no opening statement.

Senator CHILES. Senator Domenici.

Senator DOMENICI. No, thank you, Mr. Chairman. I will reserve mine for later.

Senator CHILES. Commissioner Hardy, before we proceed to questions I will ask you to summarize your prepared statement at this point.

INTRODUCTION OF ASSOCIATES

Ms. HARDY. Thank you, Mr. Chairman. It is a pleasure to be here. I am accompanied by Nelson Sabatini, the Deputy Commissioner for Management and Assessment, and John Trout, Director, Division of Human Services Budget Analysis in the Department of Health and Human Services, Management and Budget.

TOTAL REQUEST FOR BUDGET AUTHORITY

I am pleased to be here to present our fiscal year 1988 appropriation request for SSA. As my statement indicates, the request totals $17.1 billion in budget authority. The statement does detail the requests for the different accounts, and appropriation action is required in the following four areas: $105 million for payments to the Social Security trust funds; $903.9 million for special benefits for disabled coal miners; $12.3 billion for supplemental security income; and $3.8 billion for the limitation on administrative expenses.

REQUEST FOR LIMITATION OF ADMINISTRATIVE EXPENSES

As you are well aware, the limitation account provides us resources to administer the old age and survivors and disability programs and to perform certain administrative functions for Medicare. It also includes resources to administer the SSI Program and carry out annual wage reporting for Social Security and IRS purposes.

The funds to pay benefits from the old age insurance and disability insurance trust funds are permanently appropriated. They are not part of our budget request. We expect payments to beneficiaries in 1988 to be approximately $193 billion in old age and survivors and $21 billion in disability.

Our limitation account has four components to it: One, the large salary and expenses and other category of about $2.8 billion; funds for the disability determination services of $754 million; the information technology systems budget portion of $165 million of new dollars; and a contingency reserve of $50 million.

POLICIES AND DIRECTION FOR SOCIAL SECURITY ADMINISTRATION

My comments this morning are very brief. I would like to concentrate on that limitation account, how we believe that this request supports my overall policies and the direction of the Social Security Administration. When I became Commissioner, I established some very clear priorities, which include preserving the integrity of the trust funds, utilizing technology to our benefit and to that of the beneficiaries, providing good public service, managing our programs well, supporting the vital role of all of our employees, and, to the best of our ability, educating the public about probably the most misunderstood Government program that there is.

I have established measurable objectives to track on all of that, and I believe you and all of your colleagues will see very significant accomplishments over this year and beyond.

As you are aware, the trust fund situation is positive and very solvent, if we are correct, until the beginning and middle of the next century.

In the technology area, as you have pointed out, I am aware that Social Security is in the midst of moving probably more from the 19th to the 21st century in terms of technology, and I believe that it is vital that we achieve what we have set out to do, that we continue to move forward and at the same time that we have continued analysis of our whole ITS budget as well as our expenditures.

As you pointed out, the most visible and controversial aspect of all of the technological improvements is the systems modernization plan whereby all of our district offices, our teleservice centers, our program services centers, all of us will be linked together to what I believe will be better and more modern service to our current and our future beneficiaries.

The claims modernization process which is part of that, the hardware and much of the software will be in place by the end of 1988. As you

have stated, and that is correct, it is not all of the software, and it is a very high priority of mine to insure that the schedules are met.

I do share your concerns about timing and the expenditures in terms of the entire technology area, but I believe our current request and our request for 1988 is accurate, it will meet our needs, and it will drive the agency forward.

UPHOLDING TRADITIONS OF SERVICE

I also believe that we have a continued obligation to uphold the fine tradition in Social Security and to continue to provide the best public service that we can. I also believe that all of the Congress as well as the public needs to have a broader definition of public service. It is a combination of many things. It is district offices, it is telephones, it is appointments, it is the access and responsiveness issues in a variety of ways. It is just not one of them. So when we look at public service, we need to look across the board at the kinds of things—how this agency can serve the public in a variety of areas.

I believe we can improve our public service within our current and our projected resources, and I believe that modern technology will help us do that. It will not be the only way. We have many efforts underway, and I think they are very positive.

Last, we do have an obligation to educate the public about their expectations of Social Security, not only that it is a retirement program but it has a significant survivors portion, and disability. As I said before, it is probably one of the most misunderstood programs in Government when everybody says it is my checking account. You all know well what it is and what it is not, but I think that we have an obligation through this budget and through other processes in Social Security to try and articulate better what it is.

I think that we can accomplish all of what we set out to do and probably even more with the support not only of our dedicated and our excellent work force but also the support of the Congress. I believe that we can improve our management and we can plan for the future. Through a strategic planning process, we can continue and even improve what I think should be the most efficient and effective Government agency.

Thank you, Mr. Chairman.

PREPARED STATEMENT

Senator CHILES. We will place your submitted statement in the record at this point.

[The statement follows:]

STATEMENT OF DORCAS R. HARDY

Fiscal Year 1988 Appropriation Requests

Mr. Chairman and members of the Committee, I am pleased to be here today to present the fiscal year 1988 appropriations requests of the Social Security Administration (SSA). These requests total $17.1 billion in budget authority. In addition, funds are being requested at this time for fiscal year 1989 for permanently authorized, appropriated entitlements in an effort to simplify and streamline the appropriations process for them by requesting appropriations on a biennial basis. The requests for fiscal year 1989 total $13.1 billion.

Summary of Budget Requests Before the Committee

I would like to summarize the requests before your Committee that require appropriations action.

--$105.3 million for Payments to Social Security Trust Funds for fiscal year 1988 and $93.3 million for fiscal year 1989. Through this account the trust funds are reimbursed for the costs of certain benefits and administrative expenses chargeable to Federal funds. In the past this request had included funds to reimburse the trust funds for costs associated with granting noncontributory credit for military service after 1956. Beginning in fiscal year 1988, these funds are being requested in the budget of the Department of Defense because they are costs associated with military personnel.

--$903.9 million for Special Benefits for Disabled Coal Miners for fiscal year 1988, and $862.6 million for fiscal year 1989. These funds cover benefit payments and administrative expenses for that portion of the black lung program administered by SSA. The estimates reflect proposed legislation to maintain the base for determining fiscal year 1988 black lung benefits at the fiscal year 1987 level, and to increase the fiscal year 1989 benefit levels at a rate equal to one-half the percentage of the Federal civilian pay raise.

--$12.3 billion for the Supplemental Security Income program for fiscal year 1988, and $12.1 billion for fiscal year 1989. This request includes

SSI benefits and reimbursement to the Social Security trust funds for the administrative costs of the SSI program.

--$3.8 billion for the Limitation on Administrative Expenses for fiscal year 1988. This request provides resources needed to administer the old-age and survivors and disability insurance programs and to perform certain administrative functions for the Medicare program. It also includes resources to administer the SSI program and to carry out combined annual wage reporting for Social Security and Internal Revenue Service purposes. The trust funds are reimbursed from the general fund for the administrative costs of the SSI program and for the non-trust fund share of annual wage reporting.

Social Security Trust Funds

Funds to pay benefits from the Old-Age and Survivors Insurance and Disability Insurance Trust Funds are permanently appropriated, and therefore are not part of the budget requests before this Committee. However, current and prospective Social Security beneficiaries can look forward to the future with confidence in the Social Security system--confidence that the financial status of the trust funds has been restored and that the system will meet its obligations in the future. Under current projections in the President's fiscal year 1988 budget, balances in the OASI and DI trust funds will steadily increase to a level of nearly $105 billion by the end of fiscal year 1988.

Agency Priorities

In June 1986, I established a set of priorities to focus and direct SSA resources and energy. They are:

- Maintaining the fiscal integrity of the Social Security programs.
- Providing the best service to the public.
- Improving the way we manage our programs, to carry them out with greater efficiency, effectiveness and accountability.

- o Using the best and most appropriate technology available to administer our programs.
- o Recognizing and supporting the vital role of SSA employees.
- o Educating the public and improving public confidence in Social Security.

We have established measurable objectives to gauge our progress in achieving these priorities, and we will continue to stress SSA's commitment to delivering the highest quality service to the public in the most timely and efficient manner. SSA's administrative budget request before this Committee supports the Agency's priorities, and the rest of this statement focuses on key administrative initiatives of the Agency.

Systems Modernization, Management Improvements and Service to the Public

This is a crucial year for implementation of one of my highest priorities, the Systems Modernization Plan. Under the Systems Modernization Plan, the claims modernization project will move beyond the pilot phase in fiscal year 1987 as computer terminals are installed in local SSA offices across the country. The new modernized claims system includes immediate entry of application information into the automated system and immediate editing of that data, systems generation of completed application documents for signature, and automation of most claims computations. In fiscal year 1988 we expect that SSA will begin to realize significant savings from the modernized claims system.

When this system is fully implemented, all of our offices will have fast, easy access to individual records. We will be able to respond more quickly to beneficiary inquiries and, by improving claims processing, we will be able to get payments more quickly into the hands of new beneficiaries.

In addition, we will continue on several fronts to improve our procedures and work processes in fiscal years 1987 and 1988, as we have in recent years, so that we can better serve the public. For example:

- Through more effective targeting in selection of SSI redeterminations, we are able to reduce the level of resources required for this workload without adversely affecting SSI payment accuracy.
- Expansion of district office final authorization of initial claims decreases the number of claims which must be referred to the processing centers for adjudication.
- Automation improvements, other than claims modernization, save workyears by, for example, eliminating or modifying unproductive systems generated alerts, exceptions, or diaries which would otherwise have to be manually screened in field offices and processing centers; and generating clear overpayment notices, thereby saving time previously needed for manual preparation and for responding to inquiries.

We also are exploring innovations in the way we do business at the local level to increase efficiency and improve service delivery. Initiatives include: scheduling interviews in Social Security offices to reduce waiting times, experimenting with extended office hours to meet the needs of people who have difficulty conducting business with us during regular working hours, and promoting the broadest possible use of the telephone as an alternative to walk-in office visits. Further, we are encouraging local managers to share their best operating practices with other managers, as suggested by the General Accounting Office, in order to reduce the disparity in average workload unit times among geographic regions.

In recent years, SSA has been able to reduce employment and overtime usage and improve its service to the public through efficiencies achieved from management initiatives and increased automation of work, and I believe we will continue to do so. Some indicators of recent improvements include:

- Processing time for retirement, survivors and health insurance claims decreased from 23.4 days at the end of fiscal year 1984 to 20.7 days at the end of fiscal year 1986.
- Processing time for SSI aged claims decreased from about 16.3 days at the end of fiscal year 1984 to 10.1 days at the end of fiscal year 1986.

- Computer response time in offices dealing with the public has been reduced to under 3 seconds, providing the public with quicker responses to inquiries.
- The system for processing and posting annual wage reports has been improved, so that more than 200 million 1985 wage records were updated to the Master Earnings File by the end of September 1986--6 weeks ahead of schedule and an improvement of almost 2 months over the prior year's processing time.
- We have reduced the time for issuing Social Security account numbers from an average of 6 weeks, from application to receipt of a card, to about 11 days.
- Language in beneficiary notices has been improved to make them clearer and more easily understood.

Promoting Public Confidence in Social Security

In concert with our efforts to improve service, we are taking positive steps to promote public confidence in the Social Security system. We are working closely with a variety of organizations to educate the public about the Social Security programs and the protection they provide. We want to send the message that the Social Security system is financially sound and can be relied upon to meet its obligations to today's beneficiaries and to those in the workforce who are building protection for the future.

In addition, we are working on development of a more complete statement of earnings and a more realistic estimate of potential retirement, survivors and disability benefits for workers. This would allow workers to gain a much better picture of the benefits they and their families can expect to receive under Social Security. We are undertaking a pilot program in 1987, within existing resources, to determine how best to carry out this important public service improvement.

SSA's budget request before the Committee assumes that most of the additional Social Security number issuance work, which may result from the Tax Reform Act of 1986 and the Immigration Reform and Control Act of 1986 will be

accomplished in fiscal year 1988. Productivity improvements achieved in fiscal year 1987 will enable SSA to deal with these workloads within the level of resources requested for fiscal year 1988. However, to the extent we can, we will try to accomplish as much of it as possible in fiscal year 1987. SSA expects to benefit from productivity improvements, resulting in employment reductions through attrition, and continue to maintain a tradition of quality service to the public in the most timely and efficient manner.

The resources requested for fiscal year 1988 will support SSA's strategic planning for the future. As the public's expectations for services are heightened, and members of the public seek more accessible and convenient service such as they receive from private companies, SSA needs to have the capacity to respond. SSA is committed to a public service strategy that utilizes modern technology, such as computers and telephones, to serve the public better, faster, more conveniently and with greater responsiveness. SSA will continue to increase the service options available to our clients by expanding the numbers and types of transactions that can be handled by mail, by telephone or by walk-in visits, depending on the client's preference.

SSA has a proud record of public service. By planning for the future, SSA will be able to maintain its fine record of service to an increasingly sophisticated clientele in the changing environment that will accompany the next two decades.

Payments to Social Security Trust Funds

The FY 1988 appropriation request for Payments to Social Security Trust Funds totals $105,298,000 and covers three general Federal fund payments to the Social Security trust funds. As part of an effort to streamline the process for considering appropriated entitlements, we are requesting $93,291,000 for FY 1989.

Beginning in FY 1988, we are no longer requesting funds in this account to reimburse the trust funds for military service wage credits for current military personnel. These funds are requested by the Department of Defense so that the costs of current military personnel are more accurately reflected in the budget.

Special Payments to Certain Uninsured Persons

The request before this Committee of $54,554,000 in FY 1988 and $42,547,000 in FY 1989 is to reimburse the Old-Age and Survivors Insurance trust fund for special benefits paid during fiscal years 1986 and 1987 respectively to certain uninsured persons aged 72 years and over. The payments are made to individuals who did not have a chance to work long enough under Social Security to become insured. These beneficiaries, a declining population, were not eligible for regular monthly Social Security benefits, primarily because they retired before enactment of the Social Security Act or before their occupations were covered under Social Security.

The FY 1988 request for Special Payments to Certain Uninsured Persons is $14,840,000 below the FY 1987 estimate. The population receiving special payments is a closed group of very aged persons which declines annually. As of September 30, 1986, 25,000 persons were receiving benefits chargeable to the general funds under this provision as compared to 32,000 a year earlier.

Reimbursement for Pension Reform Administrative Costs

The second requested payment is for $744,000 in fiscal years 1988 and 1989 each to reimburse the Old-Age and Survivors Insurance trust fund for the general Federal funds share of the cost of administering pension reform responsibilities assigned to the Social Security Administration under Public Law 93-406, the Pension Reform Act. The reimbursement is for the cost of furnishing information on deferred vested pension rights to pension plan participants or their survivors. The FY 1988 and FY 1989 estimate for pension

reform administrative costs reflects a continuation of SSA's FY 1987 pension reform activities.

Unnegotiated Checks

The third requested payment of $50,000,000 in fiscal years 1988 and 1989 each is to reimburse the trust funds for the value of benefit checks that remain uncashed after 6 months, plus interest. The Social Security Amendments of 1983 provided for reimbursements based upon estimates developed jointly by the Departments of Health and Human Services and Treasury until a system capable of identifying the exact number and amount of uncashed benefit checks is implemented by the Treasury Department. The Treasury Department currently projects that information from this system will be available for computing reimbursements to the trust funds on or about May 1987.

Special Benefits for Disabled Coal Miners

The FY 1988 appropriation request for Special Benefits for Disabled Coal Miners totals $651,452,000 and is financed from general revenues. This is in addition to the $252,450,000 which Congress provided last year as a FY 1988 advance appropriation to fund first quarter benefit payments, bringing the total FY 1988 appropriation to $903,902,000. It includes $897,416,000 for FY 1988 benefit payments and $6,486,000 for administrative costs. It does not include reimbursable work done for the Department of Labor, which is budgeted for by that Agency.

In an effort to streamline the process for considering appropriated entitlements, we are requesting $862,590,000 for FY 1989 and an advance appropriation of $220,050,000 for the first quarter of FY 1990.

The year-to-year decline in appropriation requests is due primarily to the continuing decline in the beneficiary population. The requests assume that benefit payments are maintained at current level throughout 1988 and that 1989

benefits increase at a rate equal to one-half the percentage of any pay raise granted to Federal civilian employees.

Program Authorization

The black lung program is authorized by title IV of the Federal Mine Safety and Health Act of 1977, which provides for payment of monthly cash benefits to coal miners who are totally disabled because of pneumoconiosis, commonly referred to as black lung disease, and to widows and certain other dependents of miners who were entitled to these benefits or whose deaths were due to this disease.

Responsibility for Administration

The Social Security Administration is responsible for processing and paying claims for miners' benefits filed from December 30, 1969 through June 30, 1973 and claims for survivors benefits filed through December 31, 1973 or within 6 months after the death of a miner or widow already on the beneficiary rolls maintained by SSA. SSA pays benefits and maintains the beneficiary rolls for the lifetime of all persons who filed with SSA during its jurisdiction.

Since June 30, 1973 SSA has continued to take miners' claims--but as an agent of the Department of Labor, which is responsible for adjudication and payment of these claims. Costs incurred by SSA in taking these claims are reimbursed by the Department of Labor.

The beneficiary rolls for which SSA has responsibility will continue to decline gradually in years to come as a result of the death of miners and the death or remarriage of widows. At the midpoint of FY 1988, 253,000 beneficiaries will be receiving monthly benefits. This is a decrease of 18,000 from the 271,000 beneficiaries who will be receiving payments at the midpoint of FY 1987.

Explanation of Change for FY 1988 Request

We estimate benefit payment obligations to be $903,000,000 in FY 1988--$49,000,000 less than in FY 1987.

The decrease in total benefits is due to a reduction of $55,000,000 for the lower number of black lung beneficiaries, a reduction of $3,000,000 for slightly lower average monthly payments for beneficiaries in current pay, partially offset by an increase of $9,000,000 due to the full-year effect of the January 1987 benefit increase of 3.0 percent. The FY 1989 request includes $856,000,000 for benefit payments to an average of about 236,000 monthly beneficiaries.

Our budget request of $6,486,000 for FY 1988 black lung administrative expenses is $49,000 higher than the current estimate for FY 1987. The FY 1989 request includes $6,590,000 for black lung administrative expenses.

Advance Appropriation

The budget request includes an advance appropriation of $220,050,000 for the first quarter of FY 1990. This request ensures that benefit payments will continue without interruption into the next fiscal year.

Supplemental Security Income

The Supplemental Security Income (SSI) appropriation provides funds through direct cash assistance to eligible aged, blind and disabled recipients to help finance their basic needs. The appropriation request for FY 1988 is $9,537,933,000 in addition to the $2,765,000,000 already appropriated for the first quarter of FY 1988, bringing the total appropriation to $12,302,933,000. This includes $11,210,000,000 for Federal benefits to aged, blind and disabled recipients; $12,474,000 for beneficiary rehabilitation services; $1,080,184,000 for payments to the trust funds for administrative

costs; and $275,000 for demonstration projects previously funded from the Assistance Payments appropriation.

In an effort to streamline the process for considering appropriated entitlements, we are requesting $12,102,224,000 for FY 1989 and an advance appropriation of $2,684,000,000 for the first quarter of FY 1990.

Federal Benefit Payments

The SSI program ensures a minimum monthly level of income to eligible aged, blind and disabled individuals. An individual's income, resources and living arrangements are evaluated to determine the actual amount of SSI payment. Payments are delivered through monthly benefit checks.

The average monthly number of SSI recipients of Federal benefits is projected to increase from 3,933,000 in FY 1987 to 4,029,000 in FY 1988, an increase of 96,000. This increase is due to projected growth in the number of blind and disabled SSI recipients, partially offset by a slight decrease in the projected number of aged SSI recipients.

The FY 1988 request for Federal benefit payments is $11,210,000,000 or $1,420,000,000 higher than the FY 1987 level. This increase is needed to fund:

--The 3.5 percent cost-of-living increase projected for January 1, 1988;
--One additional payment in FY 1988 (totalling 13) since the first day of FY 1989, October 1, 1988, falls on a Saturday requiring earlier payment; and
--The projected increase in the number of blind and disabled recipients.

The FY 1989 request includes $11,040,000,000 for Federal benefit payments to an average of 4,118,000 monthly SSI recipients. In FY 1989 there will be 12 monthly payments and the request assumes a 3.6 percent cost-of-living increase for January 1, 1989.

Beneficiary Rehabilitation Services

SSA provides funds to reimburse vocational rehabilitation agencies for costs incurred in successfully rehabilitating SSI recipients and for instances of discontinuation of benefits prior to completion of vocational rehabilitation. For FY 1988 we are requesting $12,474,000 for this activity. This includes $10,400,000 for vocational rehabilitation and $2,074,000 for the referral of SSI recipients with drug or alcohol dependency to treatment programs and monitoring their participation in those programs. The FY 1989 request includes $12,549,000 for the Beneficiary Rehabilitation Services activity.

Payments to the Trust Funds for Administrative Costs

The SSI and Social Security programs are administered on an integrated basis for purposes of economy and efficiency. The Social Security Act authorizes advances from the Social Security trust funds to pay the administrative costs of the SSI program through the Limitation on Administrative Expenses account. The advances are fully repaid from the SSI appropriation. SSA maintains a detailed cost allocation system, which has been audited by the General Accounting Office, to ensure that the trust funds are made whole (with interest, if appropriate) for the administrative expenses of the SSI program. The FY 1988 request for this activity is $1,080,184,000. The FY 1989 request for this activity is $1,049,400,000.

Advance Appropriation

The budget request includes an advance appropriation of $2,684,000,000 for the first quarter of FY 1990. This request insures that benefit payments will continue without interruption into the next fiscal year.

Limitation on Administrative Expenses

The Limitation on Administrative Expenses is a request for authority to spend up to $3,805,121,000 in FY 1988 from the trust funds for administrative expenses of the Social Security Administration. From this account we pay for administration of the old-age and survivors and disability insurance programs, the supplemental security income (SSI) program for the aged, blind and disabled, Medicare work performed by SSA and certain other work. For reasons of economy and efficiency SSA has integrated administration of both trust fund and some nontrust fund programs. The Social Security Act authorizes payment of SSI and certain other nontrust fund administrative expenses from this account, with full reimbursement from general funds in other accounts.

Of the new 1988 budget authority requested:

--$1,162 million is for administering the old-age and survivors insurance program,

--$1,295 million is for the disability insurance program,

--$144.3 million is for SSA's Medicare support functions,

--$1,034 million is for administering the SSI program,

--$84.2 million is for processing annual reports of earnings,

--$35.6 million is for annual SSA purchase contract payments on buildings previously constructed under the purchase contract method of financing, and

--$50 million is for a contingency reserve.

Included in the first five activities is $165.4 million in budget authority for automatic data processing and telecommunications activities and $754 million for the Disability State Agencies.

Automatic Data Processing (ADP) and Telecommunications

The FY 1988 request for new no-year budget authority for ADP and telecommunications is $165.4 million, a decrease in new budget authority of

about $42 million. We estimate that we will obligate $281.8 million in FY 1988, $23 million less than in FY 1987. This estimate of obligations, which includes the carryover of unobligated funds from prior years, will provide for SSA's continued progress in modernizing its systems hardware and software, the acquisition of telephone systems, as well as ongoing systems and telephone costs.

SSA plans to obligate $188.8 million for ADP and telecommunications projects in FY 1988. This includes $120.3 million for Systems Modernization Plan (SMP) projects and $68.5 million for other ADP and telecommunications projects. Some major SMP projects budgeted for FY 1988 are:

--$20.2 million for the terminal acquisition project, that is modernization of the SSA telecommunications network that connects all field offices, program service centers and data operations centers with our central computer facilities. This will permit faster processing of claims and beneficiary inquiries by more of our employees who serve the public directly.

--$9.3 million for developing and implementing office automation systems to enhance access to program and administrative information by SSA's managers.

--$9.0 million for test and timesharing facility replacement which will upgrade SSA's interactive and program development capacity. This permits development and testing of software.

Although SSA will obligate $68.5 million for other ADP/telecommunications projects, approximately $59 million of it is for ongoing lease, maintenance and supply costs.

SSA also plans to obligate $93.0 million for telephone systems in FY 1988. This includes about $73 million for ongoing maintenance, lease and usage costs, including Federal Telecommunications Systems charges.

Disability State Agencies

The budget request includes $754 million for the Disability State Agencies in FY 1988. This represents a net increase of $12.8 million, or 1.7 percent, over the FY 1987 operating budget of $741.2 million, and it is associated with a 2.2 percent increase in workloads.

The principal State agency workloads to be processed in FY 1988 are 1,714,000 new claims for disabiity, 216,000 continuing disability reviews (CDR's), and 589,000 reconsiderations of both new claims and CDR's.

Improved productivity will result from work simplification efforts; from resolution of staffing imbalances and the achievement of more uniform productivity; and from program stability and increasing familiarity with operations under the new disability program regulations.

Management efforts to control medical costs will focus on national uniformity in procedures in securing medical evidence, maximum utilization of evidence of record from treating sources, and uniform procedures to ensure that consultative examinations are purchased when needed, are complete and cost-effective.

Federal Staffing

SSA's staffing plans call for continued progress toward the President's productivity improvements goals. The estimates of workyear needs for FY 1987 and FY 1988 are built upon workload experience in FY 1986 and the time it took to process each unit of work. Projections of workyear requirements also take into account the volume of work we expect SSA to process and various factors which will affect the time it takes to process the work, including management and procedural changes and automation improvements. To achieve its overall workyear needs, SSA will continue to rely on a mix of full-time equivalents (FTE's), nonceiling employment and overtime workyears. For this account, SSA

is requesting 72,675 workyears for FY 1988, a decrease of 639 workyears from the FY 1987 level of 73,314 workyears. We plan to use 72,675 workyears in FY 1988 with 69,345 FTE's, 1,787 workyears of nonceiling employment (principally summer youth employment), and 1,543 workyears of overtime. In FY 1988 overtime is estimated to be about 2 percent of total workyears. This represents the most effective mix of FTE's, overtime and nonceiling employment workyears for FY 1988.

In FY 1988 FTE's decrease from the FY 1987 level by 2,454, while the amount of overtime and nonceiling employment increases by 1,815 workyears. The level of overtime and nonceiling employment workyears for FY 1988 is consistent with the total workyears needed to process anticipated workloads at budgeted production rates. SSA's FY 1988 budget plan restores overtime and nonceiling employment to approximately the levels of FY 1986.

In spite of anticipated increased workloads in FY 1988, SSA is able to reduce its workyears in FY 1988 from the FY 1987 level because an estimated 2,134 workyears of savings will result as the automation of the Title II claims-taking process is phased in. The automated process includes immediate data entry and edit, and systems generated application documents.

In addition, we anticipate a continuation of productivity improvements obtained in 1987 based on SSA's policy of restoring production rates to levels achieved in prior years, reducing the disparity in average workload unit times among geographic regions, and otherwise improving productivity Agency-wide. These and other changes will help us to realize our goals to process budgeted workloads including those required for recent legislation, maintain our level of service to the public and move toward a more streamlined, efficient organization. Both SSA and GAO closely monitor certain indicators of service to the public. Should these measures indicate deterioration from our customarily high standards, appropriate action will be taken.

Contingency Reserve

For approximately the last 25 years, Congress has approved a contingency reserve for SSA's basic administrative budget acccount, the Limitation on Administrative Expenses. The FY 1988 request includes a contingency reserve of $50 million, a decrease of $110 million from the $160 million requested for FY 1987, but the same level requested prior to FY 1986. The $50 million reserve in FY 1988 will give SSA flexibility to make a response to process increased workloads not anticipated in the budget estimates, for automation projects and their impact on the workforce, and to meet mandatory increases in costs of Disability State Agencies.

Funds for Ergonomic Furniture

In FY 1987, because of concerns by the General Accounting Office (GAO) that SSA's plans for furniture procurements were not thoroughly identified or justified, the Congress added appropriation language earmarking $64.7 million for "ergonomic" furniture, which would not be available until September 30, 1987, but which would remain available until September 30, 1988. SSA has reexamined its plans and is adopting a conservative approach in planning for furniture procurements. SSA's FY 1988 budget request proposes to spend about $30 million of the $64.7 million for furniture for field offices and the remaining $34.7 million for regular administrative expenses. We have taken this approach because of GAO and Congressional concerns, and in recognition of fiscal constraints government-wide. This approach is consistent with the recommendations in the report submitted to me by the Department's Office of Inspector General on October 30, 1986, an independent review I asked for in September 1986.

FY 1987 Transfer for Increased Pay Costs

There is one other matter that I wish to bring to your attention. In the budget we are proposing to transfer $18,000,000 from the Automatic Data Processing (ADP) and telecommunications no-year funds earmark to regular

annual funds in FY 1987 to help absorb the full cost of the January 1987 Federal pay raise within this account. Our request is included in the Department's Justification of Supplemental and Rescission Appropriation Estimates for Committee on Appropriations, for FY 1897 increased pay costs. This action will not require an increase in new budget authority for this account and it will not adversely affect SSA's Systems Modernization Plan or other ADP/telecommunications activities funded from the no-year earmark.

RELATIONSHIP BETWEEN SERVICE AND SYSTEMS MODERNIZATION

Senator CHILES. Thank you very much for your statement, Ms. Hardy. You are a fairly new commissioner and one in a long chain of commissioners. I want to preface my remarks and my questions by saying that we start off understanding, and I am very concerned, that many of the problems are there because we have had a chain of acting and temporary people there for short periods of time, and I know that you have not been on the bridge too long.

We, I think, are concerned in the Congress to see that in many of the budgets that are coming before us, we are talking about the ability to reduce all kinds of personnel out of Social Security offices. Those claims are based and the reason we are supposed to be able to do that is because we are modernizing this system. We are going to be able to automate it; therefore, we are going to be able to have a lot fewer people.

It sounds very good. Then when we go back and try to find out what is happening to the modernization process to see if it is keeping pace with the reduction of people, and it does not seem to match up that way.

So, again, I think the Congress is very concerned that we keep a high level of service to Social Security recipients.

GAO REPORT ABOUT SSA SYSTEMS BUDGET

The report that I told you about, I know you have not had an opportunity to see this report. We received it in its final form yesterday. It will be released today, and we will provide copies to you. You may want another session with us. If you do, that is fine. We may want another session on this report ourselves.

There are a couple of charts there that I think help to explain it. The one that is closest to me points out the huge amount of unspent funds that are carried over in each year's Social Security Administration systems modernization plan. The white bar for each year shows the amount that was budgeted for the computer system modernization, and the dark bar shows the amount that was spent.

It is obvious from that to me that the program has to be way off track, because the amount spent each year since 1984 is way below the amount that the Social Security Administration budgeted. We see the

figures are fairly close in 1983, $27 billion or actually more spent than was budgeted, $38 billion to $27 billion.

Now the next year, 1984, requested and received $106 million, spent $32 million. In 1985, $105 million and spent $55 million. In 1986, $155 million and spent $93 million. In 1987, $209 million and spent $117 million.

Then the next chart shows the cumulative effect of the first chart, in that you see the first bars repeat the data, $601 million has been budgeted for the system, and $335 million was spent.

BUDGETED AND UNBUDGETED SYSTEMS PROJECTS

The third bar is probably the most distressing thing that I see out of this report, and that shows that of the $335 million that is spent, $147 million was spent on the actual projects that were submitted in the budget to the Department of Health and Human Services and to the Office of Management and Budget for approval, and that more than one-half of all the spending was for projects that the SSA had never requested in its budget submission.

Now, I do not know whether you or Mr. Sabatini can give me an answer as to why that happens, but maybe, Mr. Sabatini, you have a longer corporate memory than Ms. Hardy. From either one of you, I would like to try to find some answer for that.

Ms. HARDY. I think we can both address it, Mr. Chairman. I share your concern in terms of the expenditures, but I also believe if we never needed the whole $610 or $600 million when we got to the end of this thing that we would have done an even better job.

Senator CHILES. What was that now?

Ms. HARDY. If we had *x* that we put in front of us and we did not spend all of it, I would feel very good about it if we had still accomplished the same things we had set out to do.

Senator CHILES. I would feel great about it, but why would you keep asking for more every year?

Ms. HARDY. We have asked for a lot less this year, which I am very pleased about. We have asked for $108 million, plus $57 million for telephones, and we believe that this is the last year that we will have a carryover.

The concern that I also have is that we have technology which is much cheaper now than our estimates. The purchases that we have made are one-third in some of the cases of what we had expected when the first estimates were done, and hardware is getting less expensive.

We have looked at how we are using all of this equipment, and I think there were some overestimates in the beginning of all of this. I think we can figure out exactly how we need to spend those dollars and go forward with it. As we have proposed, this is the last budget where we would have any carryover dollars.

Mr. SABATINI. Mr. Senator.

Senator CHILES. Mr. Sabatini.

Mr. SABATINI. The 1988 budget is requesting the lowest dollar amount of new money in the systems area since 1982. The request that we have for new money in 1988, as I say, is the lowest we have had since 1982.

CARRYOVER OF SYSTEMS FUNDS

Senator CHILES. You know, that again is not a very good answer to me. Why are you requesting any if you have $300 million sitting there that you are not using?

Mr. SABATINI. Well, it is $200 million that was carried over in 1987.

Senator CHILES. Well, I have $601 million and $335 million.

Mr. SABATINI. The total amount carried over from 1986 into 1987 was $214 million. We have taken and reduced—we are as concerned about the unobligated balance as you are. We have reduced our request for new money in 1988——

Senator CHILES. Were you concerned last year about it and the year before, Mr. Sabatini? You have been on here for a while. How long have you been here?

Mr. SABATINI. Several years.

Senator CHILES. Several years. Well, how concerned were you several years ago?

Mr. SABATINI. We were concerned, but if you look at what happened, several things happened in 1986 and 1987. One of our largest acquisitions that we had planned came in approximately $40 million under what the best estimates were at the time.

We are finding consistently that in our major hardware acquisitions, the price and the cost to the Government is significantly lower than what the best estimates were when we put our request together.

Senator CHILES. So what you are saying is because you all have kind of fooled around and waited so long to fix the system that it has been fortuitous. The technology has gotten better.

Mr. SABATINI. I think the trend in hardware technology for the past several years has been that the hardware is getting cheaper and cheaper each year.

Senator CHILES. Then if we want to wait another 10 or 15 years without doing anything, it will get cheaper still.

Mr. SABATINI. There are also some other major projects that we had anticipated at the beginning of the announcement of the systems modernization plan that at the time appeared to be valid projects which needed to be pursued. By 1986 we found that things in the environment had changed and that it would no longer be cost effective to pursue those projects, and we dropped them rather than spend the money for a project that would not yield cost-effective benefits.

AMOUNT OF FUNDING FOR SYSTEMS

Senator CHILES. Well, my figures are showing me, what I am looking at in your ADP telecommunications budget, page 97, that you are requesting $165,400,000.

Mr. SABATINI. Yes, sir, $165 million. Of that——

Senator CHILES. And it says you have $281 million in a balance.

Mr. SABATINI. Of the $165 million that we are requesting, $57 million of that is for telephones, telephone equipment, and line charges. That is a category that was not reflected in the ITS budgets until 1984. What we are asking for in new money in 1988 for our systems-related activities is $107 million, which if you back out the telephone money, that is a comparable number to the 1982 level, which was approximately in the neighborhood of $120 million.

So what we are requesting for systems activities in 1988——

Senator CHILES. What was the request you sent to OMB?

Mr. SABATINI. The request to OMB?

Senator CHILES. Yes; OMB lowered your request. What did you send to OMB?

Mr. SABATINI. The request for the systems in the ITS budget area was, I think, the same. That was not lowered.

Senator CHILES. It was not altered?

Mr. SABATINI. No, sir.

Senator CHILES. It was not cut $100 million?

Mr. SABATINI. Pardon? The systems money?

Senator CHILES. Yes; was it not reduced $100 million by OMB?

Mr. SABATINI. Not in 1988.

Ms. HARDY. I cut it.

Senator CHILES. Check that for the record.

Mr. SABATINI. Yes; we will check that.

[The information follows:]

FISCAL YEAR 1988 ESTIMATES FOR INFORMATION TECHNOLOGY SYSTEMS [ITS]

While the request for new budget authority in fiscal year 1988 decreased, projected increases in carryover will provide about the same level of funds as originally planned for fiscal year 1988. The table below compares the fiscal year 1988 ITS plans sent to OMB and the revised plans reflected in the request to Congress:

INFORMATION TECHNOLOGY SYSTEMS [LAE] 1988 REQUEST

	Request to OMB	OMB mark	Request to Congress
New budget authority:			
ADP	$162,000,000		$107,800,000
Telephones	63,400,000		57,600,000
Total, ITS	225,400,000	$185,000,00	165,400,000
Carryover from fiscal year 1987 to fiscal year 1988	41,600,000		116,400,000
Obligations	267,000,000		281,800,000

GROWTH IN CARRYOVER BALANCES

Mr. SABATINI. Another important thing that we are asking for to deal with this problem of unobligated balances is the committee's support to allow us, in effect, a no dollar supplemental to move $18 million of that ITS money into the non-ITS account to help with pay raise absorption. So the unobligated balance has grown. It has grown for a number of

reasons. Part of it legitimately was overestimates in the early phases of the program. We are concerned with that, and we are taking that unobligated balance now and dealing with that in the 1988 budget submission, Senator.

Senator CHILES. Mr. Sabatini, you still have not answered my last question about this $147 million there.

Mr. SABATINI. The $147 million reflects, I would think, a combination of three things: One, that the actual cost of hardware is significantly lower than what we had estimated; two, that there was a large, major project that we had anticipated funding and that, as a result of a number of changes, some of them involving regulatory changes by the Internal Revenue Service, it led us to the conclusion that expenditure of the money to modernize the system would not yield the cost-effective benefits that we had originally anticipated; and third, just unanticipated delay in some of the procurement process that caused the money to roll over from year to year.

Senator CHILES. What that number is, though, that $147 million is the amount of the $335 million that was actually spent on things that you had requested. So what I am trying to find out, in effect, that leaves $188 million that you spent on something that you had not requested.

Now, what is that? Maybe I should have had another bar. In other words, if you take the $147 million out of the $335 million, the report says that basically is the only thing they can find of that $335 million that you spent that you had requested, that you made a request for.

That leaves $188 million, if my arithmetic is right, that you spent on something that you did not make a request for. What was that?

Mr. SABATINI. Those are other expenditures. As we move toward the systems modernization efforts, it gets very difficult to really clearly define system modernization expenses as compared to ongoing expenses. For example, when you make major hardware acquisitions, which are an integral part of the systems modernization plan, there are recent maintenance charges that accrue to that. One of the major steps, first steps we took——

Senator CHILES. Those leases and things, those are accounted for in other numbers. That is not accounted for under these numbers.

Mr. SABATINI. Senator, I would need to see the report and look at it in detail.

POSSIBLE MULTIPLE REQUESTS FOR THE SAME ITEM

Senator CHILES. I think that maybe is what needs to be done, and maybe we are going to have to ask you a little further on that.

I want to hand you a few documents and see if you can tell me something about that. These are five documents that SSA requested funding for the administrative computer replacement project. It looks like to us in four of these years, four out of these five documents, $3,203,000 was requested and approved by OMB and subsequently approved by the Congress. Now, in the fifth year $2 million was requested for the same purpose, and that was approved.

So we have 4 years that we have the same request, and the fifth year we have a $2 million request. I would like you to look at those documents and tell me if you agree if they, in fact, show, and I do not know the answer to this, that in each and every year between 1983 and 1986 you requested and received the same money for the same project.

Maybe these are multiyear purchases. I do not know. Is this a multiyear purchase, or is this the same piece of equipment that you have requested and been approved for four times and then the fifth time they cut you down, or you only requested $2 million for the fifth time?

What I am talking about is if you will look on the first page, obligations fiscal year 1983, you see the figure $3,203,000, and the description of that is the current SSA computer system is saturated, outmoded, inadequate to meet the existing as well as projected needs for administrative, statistical, and management data. The solution to this problem is consolidated procurement which will provide adequate computer capacity to SSA headquarters and field facilities.

Then we find exactly that same statement, the same amount of money in the next year, $3,203,000, for the same thing, and then the same explanation, it is saturated, outmoded, inadequate. Then we find that the next year, the same amount and the same description, that that has got to catch up for that, and then we find that repeated again the fourth year. Then the fifth year we only ask for $2 million for that system.

Can you tell me, is that the same request for the same piece of equipment? I do not know whether it is hardware, software? I think it is hardware.

Mr. SABATINI. The request relates to an economic replacement of a management information computer mainframe that we had, and we requested the money to improve that, to replace that, and that was part of the initial systems modernization plan. We did acquire that computer, I believe, in 1983 or 1984, and we made the economic replacement. I would have to review the details of these tables and the other tables that we have, and we could respond.

Senator CHILES. Does it sound to you that the request was made for the exact same thing? Did we get it once and then ask for the same thing four more times?

Mr. SABATINI. No; I think what happened, to the best of my recollection, was we requested the money in 1982 or 1983, and the procurement of that piece of equipment slipped into 1984, and then in preparing the 1984 tables we showed that as a proposed obligation.

GAO'S VIEW ON BUDGETING FOR MANAGEMENT INFORMATION COMPUTER

Senator CHILES. Mr. Quasney is here of the General Accounting Office. He is the Associate Director. I wonder if he might come up here just a minute.

Mr. Quasney, can you come up to the table for just a minute?

Mr. Quasney, this is your report or the report of the General Accounting Office. Can you tell me what your feeling was on this particular item? Can you shed any light on it for us?

Mr. QUASNEY. These were the documents that we requested and received from SSA for the official submission to OMB and the final approved documents for which the budget would be executed against. This is one item within a total package of all the budget items requested.

If you will notice in 1983, you will see that it was requested that it would be for $3,203,000, and it showed that previous year obligations in 1981 were $99,200,000. You also notice that it is projecting out from 1984 to 1987 additional numbers, showing you the expected life cost of what they would expect to need in additional budgeting in future years.

The problem is that when you go to 1984, you will notice that it indicates that there was nothing given in 1983.

Senator CHILES. Oh, I understand now. I am looking at fiscal years 1984 and 1985 and 1986 and 1987. Those are showing the additional costs, projected costs, for that item.

Mr. QUASNEY. Yes; and each year you have a sliding scale. In 1984, you are asking for 1984 and projecting to 1988, and you are showing 1982 and 1983 history.

Senator CHILES. Yes, sir.

Mr. QUASNEY. You will notice on the 1984 it showed zero for 1983, when, in fact, they received $3 million for that project.

When you go to 1985——

Senator CHILES. Now, just a minute. They received the $3,203,000 for that.

Mr. QUASNEY. Yes, sir.

Senator CHILES. But then the 1983 shows zero, so it shows that they did not receive it.

Mr. SABATINI. No; it shows it was not spent. These are obligations, Senator. It was not obligated.

Senator CHILES. It was not obligated.

Mr. SABATINI. It was not spent.

Senator CHILES. OK. All right, but they asked for it again?

Mr. QUASNEY. Yes, sir.

Senator CHILES. They show the same life-cycle costs going out.

Mr. QUASNEY. Yes, sir.

Senator CHILES. Those have not changed.

Mr. QUASNEY. Yes, sir.

Senator CHILES. All right, sir. Go ahead.

Mr. QUASNEY. They received it again in 1984. In 1985——

Senator CHILES. We see zero, so we know that they did not expend it.

Mr. QUASNEY. Yes, sir.

Senator CHILES. All right, sir.

Mr. QUASNEY. In 1985, it was requested again, and they received the money, and it is projecting out now until 1989.

In 1986, you see an expenditure of $500,000 in 1985 and requesting $3,203,000 again. The money was approved in their budget to be executed.

In 1987, you will see the number has now been dropped to a $2 million request, showing expenditure in 1986 of $900,000. That is the full cost at this point.

Senator CHILES. But now why would this life-cycle cost go to $9,800,000 in 1988, $9,200,000 in 1989? Why are they showing those costs?

Mr. QUASNEY. That is to give OMB an indication of the out-year commitments that they would need in order to complete the project. It is looking ahead at future budget requests for this particular project.

Mr. SABATINI. It also reflects a change in the nature of the project, too.

Mr. QUASNEY. Yes, sir.

Mr. SABATINI. It was originally started as an economic replacement for the single mainframe. That slipped, and as we moved forward, the project was expanded to encompass a total redesign of the financial administrative accounting system for the agency, and the increased out-year costs reflect a much larger project than what was originally reflected.

Senator CHILES. Well, we were normally getting testimony here that everything was getting cheaper, but now this——

Mr. SABATINI. Individual pieces of hardware are getting cheaper. We were originally talking about an economic replacement of a single piece of hardware. The project subsequently changed and grew to not only replacement of a single piece of hardware but the development of a total administrative system for the agency with other pieces of hardware.

CARRYING OVER UNOBLIGATED SYSTEMS FUNDS

Senator CHILES. Is not the bottom line of this that you got this money four times and that you still kept requesting it over and over again?

Mr. SABATINI. We did not obligate it. We had the money, and the money stayed there. It stayed over. It was not obligated.

Senator CHILES. Was the money carried over?

Mr. SABATINI. Yes; this was part of the carryover.

Senator DOMENICI. Mr. Chairman, could I ask whether, with regard to this report which we are seeing here today and obviously they are seeing for the first time, you have made any conclusions with reference to any improprieties with reference to this item? This report is merely the record of an obligated account and what has happened to it over a period of 4 or 5 years.

If there is anything different about it, it is why it was an urgent item and yet the funds have not been spent. The report does not indicate any action on the part of the agency to double the request for money for the same item or of spending money for the wrong thing. It merely indicates that the acquisition did not get accomplished, and so they did not spend the money.

Is that right, for the first 3 years?

Mr. QUASNEY. Yes; except that each year they received that amount of money. If you add up the total requests, they got $3 million the first year. It went to $6 million. It went to $9 million, and it went to $12 million. The money was not spent.

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Senator DOMENICI. Right.

Mr. QUASNEY. Some was, a small amount, and the remaining funds are in the carryover account.

Senator DOMENICI. Well, frankly I would think they ought to give us an explanation of this at their earliest convenience. I would also raise as a general matter, that obligational authority versus actual expenditures and the use of carryovers, is a complex part of the Federal budget process. One of the reasons that we have difficulty estimating outlays in this place is there is an awful big difference between obligational authority and actually spending money.

In this case, if I understand it correctly, although funding is requested and obligated, it is not spent. There is no contention on your part that they spent it for the wrong thing or spent it for something other than that for which they had requested it, is there?

Mr. QUASNEY. At this point, that is correct, sir.

Senator CHILES. Well, let me ask you this, though, Mr. Sabatini. Is it not true you asked for the first money, $3,200,000; you have that money; you did not obligate it; and you then went back and asked for that same money the next year?

Mr. SABATINI. No, sir.

Senator CHILES. Then if I look at your report, I see you saying in the first year, 1984, you want $3,203,000?

Mr. SABATINI. Yes, sir.

Senator CHILES. In 1985, you want $5,600,000 or you will need $5,600,000; in 1986, $5,045,000; in 1987, $7,045,000; in 1988, $1,245,000.

Now, I see those exact same numbers in the next year. Why would they be the same?

Mr. SABATINI. OK, if I may, in 1984, the first year, we asked for $3.2 million, and we were given $3.2 million.

Senator CHILES. Right.

Mr. SABATINI. We did not spend that money in 1984.

Senator BUMPERS. You spent none of it?

Mr. SABATINI. No.

Senator CHILES. No.

Mr. SABATINI. We did not spend that money in 1984. That money carried over into 1985. We did not ask for more money or ask for that money again. We had that money. We asked again. We said we did not spend that money in 1984, would you please give us the authority to obligate and spend that money in 1985.

Senator CHILES. Oh, only the authority? You did not ask for more money?

Mr. SABATINI. Obligational authority. We did not ask for that same money again. These are obligations, Senator. These are obligations, and we asked for the authority.

Senator CHILES. Mr. Quasney, is that right?

SYSTEMS DOCUMENTS SUBMITTED TO OMB

Mr. QUASNEY. No, sir; these documents are submitted to OMB as part of the A–11 circular, and they are requesting and explaining the details of what the final budget request is. OMB then would send back down what the final number is, the final dollar value. SSA at that point would make a determination as to what projects would, in fact, not be done based on that current year's allocation.

When we requested these documents from SSA, we were told that these documents were the actual official documents for each year for which they had approved budget from HHS, OMB, and consequently also the Congress, and that is what they were executing against each year.

So in each year, they took and received $3.2 million. It was cumulative into the carryover fund.

Mr. SABATINI. It was not an accumulative $3.2 million. It was not $3.2 million that went to $6.4 million.

Mr. QUASNEY. Yes; it was.

Mr. SABATINI. We can sort this out. These reports clearly reflect our obligation plan, and they say obligation.

Senator CHILES. You are saying you did not get another $3,200,000?

Mr. SABATINI. No; we asked for the authority to obligate that, and that carried over.

Senator CHILES. Ms. Hardy, do you have anything to say on this?

FLEXIBILITY PROVIDED BY SYSTEMS FUNDING

Ms. HARDY. It seems to me that the whole issue of how much we are going to spend by the time we get to the end of this, hopefully sooner than later in terms of all of this ITS. If the money were still at $600 million and it has taken us longer to get there—and it should not, and we are trying to do better on it—but we have not increased the total outlook of what this whole thing is going to cost. If we can do it faster and quicker and cheaper, then we do not need all those dollars.

Senator CHILES. Certainly you are not doing it faster when you see you have not spent zilch on this.

Ms. HARDY. I am aware of that.

Senator CHILES. The question is were you sort of piling up money and asking for the same thing over and over again. Normally, if somebody gave you some money for something and you take that money and then go ask for it again, the same thing the next year, that is not considered too proper around here.

Ms. HARDY. It is all a question of this roll and carryover balance.

Senator CHILES. Well, that is a nice question of roll and carryover.

Ms. HARDY. Maybe we should go back to the 12 months, but the question is——

Senator CHILES. You will be talking to the U.S. attorney about something like this.

Ms. HARDY. How do we do procurement when it takes us 18 months to purchase things and get things done if we cannot have this kind of flexibility that the Congress has given us?

Senator CHILES. Well, I would say you have pretty good flexibility here if you look at how much money you have piled up all this period of time. I do not think your problem has been flexibility. I think the problem has been nobody there ever did anything.

Ms. HARDY. Well, I am trying to change that.

Senator CHILES. I certainly hope you are. Obviously, we have a dispute, in fact, here. I guess we will just have to wait and see how it comes out.

I think a very key point is if you are right, Mr. Sabatini, that this was simply obligation and each time you were going back and asking to be obligating it, then the problem is why in the heck did it not ever get off the ground?

On the other hand, if each time you were asking for it you were piling up money, then you were asking and receiving money for one thing over and over again, and that is not kosher. That will not play.

Senator DOMENICI. Mr. Chairman.

Senator CHILES. Yes.

REASONS FOR DELAY IN SYSTEMS' PURCHASES

Senator DOMENICI. I think the very important question that you have to answer for the committee, in addition to whether you doubled up on the request, is why it took so long, assuming your explanation is correct. If it is not, obviously there is a different problem. I think you ought to tell us why it took so long.

It appears to me that the first explanation was one of urgency, as I read the footnotes. Clearly somebody ought to be able to tell us. We do not like to put obligational authority in 3 years in a row. You did not spend it. We put it back in. It was urgent the first time around. If you were correct, it is the same item and you requested it again.

It seems to me that an explanation of why we should have had to do that in this instance might be a very good explanation of the appearance of a funding pileup. Perhaps that is what we ought to have by way of an explanation of the entire accumulation of funds that the chairman is asking about.

You are saying you may never have to spend it all. That would be great if you do not and still accomplish the same goals. I understand changing the leadership. I understand computer hardware is difficult to keep up with. I understand this is a monstrous system. It was in terrible shape, and I really think in explaining this item that you also ought to include for us a detailed explanation, from the technical aspect of trying to upgrade the system, why it is taking so long, thus requiring the accumulation of the obligation authority.

Frankly, I hope you understand that on the accumulation of the obligational authority or these so-called unobligated balances that nobody is picking on you.

Senator CHILES. I tried to start off in my remarks by saying that.

Senator DOMENICI. Not only in his statement is he not, but let me suggest to you that for 6 years, if you have been cognizant of what has

been going on in Congress versus the Defense Department, we have a very similar problem. Those who run the Defense Department have had a very difficult job explaining to us and to the American people how the unobligated balances continue to accrue without an explanation of why they do not either get spent or canceled.

Those unobligated balances at one point were in the billions. They still are. They are declining dramatically, but it is a similar question with reference to the whole problem of unobligated balances. We have questioned this practice, but it remains an issue as I see it.

I would hope that you would give us a detailed explanation of why that continues to occur.

Ms. HARDY. I would be pleased to do that.

[The information follows:]

UNOBLIGATED (CARRYOVER) BALANCES IN INFORMATION TECHNOLOGY SYSTEMS ACCOUNT

Unanticipated delays in the procurement process, and lower than anticipated costs for certain procurements have caused sizable carryover balances in past years. However, SSA's fiscal year 1988 request for new ITS budget authority is the lowest we've every made, and a larger portion of the total obligation plan is for relatively fixed costs than has been true in the past. Thus, while SSA expects to carry over $116.4 million from fiscal year 1987 to fiscal year 1988, we do not believe large unobligated balances will be carried forward in the future.

Following is a table of historical carryover amounts, since 1982 when SSA first got carryover authority for information technology systems [ITS]:

INFORMATION TECHNOLOGY SYSTEMS ESTIMATED CARRYOVER COMPARED TO ACTUALS

	Estimated carryover in request to Congress	Actual carryover	Difference
Carryover from:			
Fiscal year 1982 (in fiscal year 1983 budget request)	(1)	$10,900,000	+$10,900,000
Fiscal year 1983 (in fiscal year 1984 budget request)		41,100,000	+41,100,000
Fiscal year 1984 (in fiscal year 1985 budget request)		124,100,000	+124,100,000
Fiscal year 1985 (in fiscal year 1986 budget request)	$81,900,000	217,100,000	+135,200,000
Fiscal year 1986 (in fiscal year 1987 budget request)	114,600,000	213,800,000	+99,200,000
Fiscal year 1987 (in fiscal year 1988 budget request)	116,400,000		

[1] No-year authority was enacted in September 1982, 8 months after the fiscal year 1983 budget request to Congress.

NEED FOR EXPLANATION OF POTENTIAL DUPLICATION

Senator DOMENICI. Most assuredly, the chairman is right. The duplication of a request surely would not be to your benefit in terms of what you told us you were trying to do. So I would hope you can explain that.

Ms. HARDY. Yes; absolutely.

Senator DOMENICI. Thank you, Mr. Chairman.
Senator CHILES. Thank you, sir.

GAO REPORT ON DELAY IN CLAIMS MODERNIZATION

The General Accounting Office issued a report to this subcommittee earlier this year that stated the key component of the Social Security Administration's primary computer modernization effort, the claims modernization project, has been drastically delayed. This component would have fixed severe problems with postentitlement processes. Now, those processes refer to changes in benefits for individuals already receiving monthly checks. You have that report, I am sure.

On January 22 we released that report to Secretary Bowen and asked you to give us a response to the General Accounting Office's report. We got your response. In your response, you state that the General Accounting Office was wrong when it found that the claims modernization project had been drastically delayed.

As I mentioned before, GAO asserted that these drastic delays related to the improvement of the postentitlement process. Your assertion was that GAO was wrong, that it was based on the contention that fixing these postentitlement processes was never a part of the claims modernization process.

Basically, was that your explanation of that?

Ms. HARDY. I think, Mr. Chairman, that it is a question of semantics and definitions. The systems modernization plan as I see it is the big picture, the whole umbrella under which there are four or six parts, one of which is claims modernization.

Another piece is what we call the program benefits LAG, or logical application group, which is where the postentitlement piece fits.

I think the issue again is whether or not we are on schedule, and the answer to whether or not we are on schedule with postentitlement is unfortunately we are not as good as we should be.

On the other hand, the claims modernization project and what we call CMP–FOSE, which is claims modernization project and field office systems enhancement, is the installation of the terminals and the ability to take claims automatically. The whole question of address changes, postentitlement work and also supplemental security income work is not what it should be.

They are two different items, however, and that was our discussion with GAO, that we did not think that they had been laid out correctly.

Senator CHILES. That sounds a little different from the explanation you gave us. We just said that GAO was wrong, that the postentitlement process was never a part of the claims modernization process.

Ms. HARDY. It is not technically under that CMP–FOSE column, if you will.

Senator CHILES. We are looking at the document dated March 5, 1984, and it describes the postclaims process. It says that it was. It says subsequently the claims modernization phase will address and include the remaining Social Security Administration's claim process as well as the postentitlement process.

So in 1984 you said, or your predecessor said it did include that. Well, our concern is——

Ms. HARDY. It seems to me in my estimation it does not, but it is the question of whether we are on time and what we can deliver in terms of service. I think that is the issue that we are all concerned about.

DELAY IN MODERNIZING POSTENTITLEMENT PROCESS

Senator CHILES. The question is now we are going to have to wait until the mid-1990's to be able to get this. You know, what does this mean in technical terms? We are using these terms.

As I understand it, the jargon for the postentitlement process boils down to whether SSA's ability to quickly process beneficiary name and address changes. That is one of the items we are talking about. Excessive delays and reprocessing missing or stolen checks, those are pretty important to people that are out there that are beneficiaries. That postentitlement does not seem to mean much, but I know the phone calls each of us get when there is a missing check or when a check has been stolen.

Delays in changing the records of a deceased beneficiary which result in the incorrect payments to survivors, my mail is replete with those kinds of problems.

Inability of the computer system to automatically process requests for beneficiaries to recompute payment amount, those are the meat and potatoes of where people have their problems with Social Security. Is it going to be the mid-1990's before we modernize that?

Ms. HARDY. Not according to my plan, no, sir.

Senator CHILES. Well, the General Accounting Office says that is the trail. I mean, that is the track that we are on.

Ms. HARDY. I do not agree with them.

Senator CHILES. I yield to Senator Proxmire.

INCREASES IN TRUST FUND BALANCES

Senator PROXMIRE. On page 3 of your statement, I would like to ask you about the first full sentence. It says, "Under current projections in the President's fiscal year 1988 budget, balances in the OASI and DI trust funds will suddenly increase to a level of nearly $105 billion by the end of fiscal 1988."

What has caused that steady increase over the last 2 or 3 years?

Ms. HARDY. In terms of the trust fund, sir?

Senator PROXMIRE. That is right.

Ms. HARDY. It has been building, as you are aware, over the last couple of years.

Senator PROXMIRE. Yes; I want to know how much.

Ms. HARDY. Our income has increased. In 1986 it was $205.8 billion, in 1987 $228 billion, in 1988 $259.7 billion is projected.

Senator PROXMIRE. I want to know what the balance is.

Ms. HARDY. Our balances for 1986 are $45.9 billion, $65.4 billion for 1987, and projected to be $105.1 billion in 1988.

Senator PROXMIRE. That is an enormous increase in 2 years; an increase of about two-thirds. Why is there such a huge increase?

REASONS FOR INCREASE IN TRUST FUND BALANCES

Ms. HARDY. From my discussions with the actuaries, I believe it is because of several reasons. One is employment. We have more contributions coming in clearly because of the economy.

Second, I believe in the 1983 amendments, there was some expansion of coverage. Additional people were covered within the work force.

Also, the fiscal year 1988, I believe, includes the tax rate increase. Inflation is down, and the cost-of-living adjustments are less.

Senator PROXMIRE. You say in the preceding sentence that beneficiaries can look forward to the future with confidence in the Social Security system, confidence that the financial status of trust funds have been restored, confidence that the system will meet its obligations in the future.

This is, of course, welcome news, and I do not want to be critical. After all, it is great to see any aspect of the Federal Government showing a surplus, but is this not excessive? Should we have a situation in which you are increasing by this enormous proportion each year?

Why do you need that much?

Ms. HARDY. Well, it is certainly an issue that is open to debate, Senator, and it is starting to be debated not only here but all over the country. There are those who believe, and the object of the 1983 amendments as I read them was to let the reserves build and let these large trust funds build, which according to current law will build to the trillions by 2010, 2011, so that for the baby boomers, "It will be there when they get there."

There are others who say no, that is the wrong way to go, and you should continue to tax the workers only to pay for today's retirees.

Clearly, we are phasing through from an absolute pay-as-you-go system.

Senator PROXMIRE. Under the present policy, then, this will build up to what did you say?

Ms. HARDY. I do not have it here. I believe I have seen $11 or $12 trillion.

Senator PROXMIRE. Eleven or twelve trillion dollars?

Ms. HARDY. Yes, sir.

Senator PROXMIRE. From $105 billion today?

Ms. HARDY. Yes; assuming that——

Senator PROXMIRE. We will see an $11 to $12 trillion balance?

Ms. HARDY. Just when the baby boomers hit, which is about 2012, 2015, and that is assuming that the actuaries are correct. That is assuming that everything is absolutely on the mark. I think you are aware that the actuarial projections are long range. They assume approximately 6 percent unemployment over the next 75 years, 4 percent CPI, 2——

RELATIONSHIP OF THE TRUST FUND TO THE BUDGET DEFICIT

Senator PROXMIRE. Now, as I understand it, this surplus offsets deficits in other parts of the budget; is that correct?

Ms. HARDY. That is how it is calculated, yes, sir.

Senator PROXMIRE. So that over the next several years we will be running very, very large surpluses here if you are going to achieve an $11 or $12 trillion surplus in 20 years?

Ms. HARDY. No, no; I am talking about 2015, 2012.

Senator PROXMIRE. Well, that is 30 years roughly, a little less than 30 years.

So it will give the illusion that we have a lower deficit than we have. We are understating the budget deficit if we leave the $20 billion surplus you are running aside, and I think that we should not.

Ms. HARDY. Yes.

Senator PROXMIRE. But this is sequestered money that can be used exclusively for the purpose of serving the beneficiaries under the Social Security law unless we change it; is that right?

Ms. HARDY. Correct. It is invested in Government securities for the purpose of the Social Security trust fund.

Senator PROXMIRE. Can you just give me some idea of how much of a surplus this might be in a future year, say 10 years from now? If you are going to get $11 or $12 trillion, there will be years in which you will have a surplus of $100 or $200 billion, I assume. Is that right or wrong?

Ms. HARDY. If we assume that the actuarial projections are correct, in 1992 we will have almost $400 billion.

Senator PROXMIRE. In 1992 we would have a $400 billion——

Ms. HARDY. Three hundred.

Senator PROXMIRE. Yes; but in any one year, you will eventually be running surpluses of several hundred billion dollars, maybe in the year 2000 or 2005.

Ms. HARDY. Trillions.

Senator PROXMIRE. Oh, $1 trillion in 1 year?

Ms. HARDY. By the year 2000, the trust fund reserves will be over $1 trillion.

Mr. SABATINI. Senator.

EXPERIENCE OF THE TRUST FUNDS UNDER 1983 REFORMS

Senator DOMENICI. Before you answer, would the Senator yield for an observation and maybe a clarification?

I wonder if it would not be appropriate, and if you agree maybe they can do one thing for us. The Commission to Reform Social Security predicated the reform on things that you are very, very expert in, economics, demographics, inflation, average worker pay, who is going to be covered, et cetera. Now we have 3 years of experience?

Ms. HARDY. Yes, sir.

Senator DOMENICI. I wonder if we might not ask for the record what the actuaries projected for these 3 years versus what has actually hap-

pened. I think that would be very helpful because we might know whether we are on a completely erroneous trend line in terms of accumulating a surplus or that we are right on track.

The commission had a thesis, and there is no question that the trust fund must accumulate substantial amounts of money until about 2012 or 2015, and at that point the expenditures will be enormous.

[The information follows:]

TRUST FUND PROJECTIONS VERSUS ACTUAL EXPERIENCE

The following table shows the estimates of old-age and survivors and disability insurance [OASDI] trust fund balances included in the fiscal year 1984 President's budget (sent to Congress in February 1984), the first budget to reflect the impact of the 1983 Social Security Amendments (enacted in December 1983). The table compares these projected balances with actual experience in fiscal years 1984 through 1986.

OASDI TRUST FUND BALANCES

Fiscal year	Projection in 1984 budget	Actual
1984	$28,700,000,000	$32,200,000,000
1985	35,600,000,000	39,800,000,000
1986	43,800,000,000	45,900,000,000

OASDI trust fund balances are somewhat higher than originally projected, because economic performance since 1983—primarily inflation—has been better than expected.

SEPARATING TRUST FUNDS FROM FEDERAL BUDGET

Senator PROXMIRE. I am not challenging that for a minute. It just seems to me that we ought to consider more seriously than we have separating Social Security from the budget. After all, we cannot use it. It is committed for a specific purpose. It is a dedicated tax. There is no intention on the part of anybody to raid this, as far as I know. There should not be.

For that reason, it ought to be in a separate category, but it is actually treated as an offset.

Ms. HARDY. As the reserves build, each year the net increase is treated as an offset when the total Federal deficit is calculated; yes, sir.

RELATIONSHIP OF TRUST FUNDS TO DEFICIT CALCULATIONS

Senator PROXMIRE. Why should it not be separated, in view of the fact that the funds are segregated and cannot be touched. They should not be touched. We should not be tempted to touch them. Why should we not segregate Social Security from the budget?

Mr. SABATINI. Senator, for the presentation and preparation——

Senator PROXMIRE. I understand it is, but it is not from the way we report.

Mr. SABATINI. For computation of deficits under Gramm-Rudman-Hollings, the trust funds are included in that computation, income and outlays.

Senator CHILES. But again, I think there is a good reason that if you did not at some stage show this total, you would have a totally distorted

picture of the macroeconomic effect of the fact that you do have this pile of money, that it is going to be needed at some time, but, in effect, it is a reserve or a Government savings that you put up.

If you are going to say that is something we should not even consider or think about or no one should be able to understand, that affects the economy. That affects all kinds of things. I think any economist would say that it affects these things, and if you cannot take it into consideration——

Senator PROXMIRE. You can take it into consideration. I think that in order to get a clear picture of the budget we should not report a budget which includes a segregated fund that we can in no way touch.

Senator CHILES. We do that with all kinds of other funds. We do that with the highway trust fund. We do that with many other funds that we are not going to touch for a purpose other than that for which they are dedicated.

Senator PROXMIRE. You are not going to reach a situation in the other funds, as far as I know, where you have in 1 year as much as $1 trillion or certainly close to it in surplus.

Senator CHILES. Eventually we will have that in the airport reserve if we keep building it.

Mr. SABATINI. I think we have to be very careful in characterizing this as a surplus. It is a reserve. It is not sitting there because it is not needed. It is a reserve that is critical and has to be built up because in approximately 2012 or 2015 there will only be two workers for every retired person.

Senator PROXMIRE. That is exactly right, and that is precisely the reason why it seems to me that we ought to have it segregated and separated and so forth.

Mr. SABATINI. I am not arguing that with you, but calling it a surplus is troublesome because it is not there. It is critical that it be there.

Senator PROXMIRE. I apologize. I should call it a reserve; that is just what it is. It gives us an illusion, and the illusion is $20 billion now, which is a lot of money. In the future it is going to be a fantastic amount of money, and we are going to get the impression that we balanced the budget.

Mr. SABATINI. I would disagree with you. As Senator Chiles said, I think this is a question that the Budget Committee wrestled long and hard with.

Senator CHILES. Senator Domenici.

TRUST FUNDS AND THE UNIFIED BUDGET

Senator DOMENICI. Let me say to my friend, Senator Proxmire, that there is a myth around, you know, with reference to the unified budget. One of the myths is that Lyndon Johnson did not want to propose a $100 billion budget so he agreed to put Social Security in the budget. The truth of the matter is that for a decade before that, people like Arthur Burns, for whom you and I share a mutuality of respect, had been arguing that this Government should have a unified budget re-

gardless of whether you want to draw two lines so that everybody understands it.

One budget document, however, ought to show these kinds of accounts because, as you well know, Senator, the taxes that American working men and women put into Social Security in terms of its effect on this economy are no different than the individual income tax that we have passed. All of these things have an effect on the American economy including surpluses, not just reserves but surpluses, in Government accounts.

Senator CHILES. And reserves.

Senator DOMENICI. And reserves versus us going to the credit market to finance other items of Federal expenditure. All these factors militate that we put this all in one understandable document for those who want to try to understand the effect of Government activities on the economy of the country.

We show you every time we have a budget resolution. If you want to go make it even clearer the budgeteers will tell you that in the budget for the current year the deficit would be $28 billion higher—that is the number that I recall—if you excluded from the unified budget the $28 billion accumulated surplus for fiscal year 1987.

We know that it is going to go to $56 billion in 1988, and maybe it will go higher. They will tell us when they give us the actual versus the estimate.

There is another concern. If you segregate this account totally by itself, which a number of people who purport to be for Social Security say you ought to do, the opposite thesis is that you show the American people a $300 to $400 billion account that is hanging out there all by itself.

Senator PROXMIRE. It will be a $12 trillion account.

Senator DOMENICI. I am just going to use the next 2 or 3 years, and the $12 trillion makes it worse.

What are they going to think about this? Why do we not change things? Why do we have that surplus?

Senator PROXMIRE. Let me just say that a $12 trillion account working up gradually over the years gives you a much more deceptive illusion when it is included in the budget than when it is treated as a reserve. We were told, look, we have that because we will have at that point 150, 200 million people working who are going to retire and who are going to rely on this.

It seems to me that separating Social Security from the budget is a better way to do it, a more honest, understandable way to do it than to toss the whole thing in the budget and say this is what we have.

MODERNIZATION AND PRODUCTIVITY IN ALBUQUERQUE OFFICE

Senator DOMENICI. Let me just ask you two or three questions about New Mexico.

I thank you for the time, Mr. Chairman.

First of all, might I say to you that, from what I can tell, the office in Albuquerque is one of the most modern in the United States. The staff is doing a magnificent job, and I compliment you and all of the people there for the modernization and the effectiveness of that office.

I do want to share a concern that they have there about the projected long-term goals of reducing Social Security staff as you have proposed. Now, I have no management expertise, at least not sufficient to tell you that your projection of lowering staff through 1991 as you proceed with the modernization of the system is too rapid. I am not here to suggest that I know enough to say you cannot reduce staffing levels as you move through that cycle.

Obviously, you have to get the modernization program going and prove that productivity increases because what we are interested in is service to the people. This trust fund, which is paying the benefits must be managed in a way that is good for them.

In our Albuquerque office, as an example—and again I am not at all critical here. I think the small reductions have been offset by productivity increases through modernization. They are concerned, for instance, that even at this point, where it is one of the best run offices in the country, that they have a 13-percent hang-up rate. Do you know what that is?

Ms. HARDY. No, sir.

Senator DOMENICI. That means that of those people calling in——

Ms. HARDY. Oh, on the telephone.

Senator DOMENICI [continuing]. On the telephones, that 13 percent do not wait around for an answer because of delays.

Again, at this point I am not yet complaining about that because it is low compared to others around the country. I wish we could reduce it every year.

They are, however, very concerned that if you further reduce the staff by just one more person the hang-up rate will increase to 25 percent. I also understand that there are problems in adequately training staff as SSA modernizes. I understand that you cannot get the people trained as fast as you thought.

What you are finding is that it is not possible to retrain the personnel for the upgraded jobs as fast as your goals. I believe that is a true statement, that the retraining is taking somewhat longer than you expected.

PUBLIC SERVICE IMPROVEMENTS

So I urge you to seriously look at each one of these areas before you make any further reductions in force because we need improved service, not less service, especially if we are going to justify these kinds of expenditures for modernization, the goal of which is to help the people, not to help the computer companies, I assume.

Ms. HARDY. Absolutely. Let me just say that I share your interest in New Mexico, since we made that the first statewide telephone system, and given Albuquerque, given the teleservice center, given what is going on in New Mexico, we have almost 50 percent of our claims, just

claims, are coming in over the phones. So we look to New Mexico to give us that kind of feedback, if you will, in terms of rates and response rates.

At the same time, as I said earlier, public service is broader, and it may mean that in many cases and not just there we need improved telephone equipment and that we need to shift, as you say, and specially train people in responding more in different ways using the phone and other pieces of equipment like that.

I am looking to that State because I think that they will be able to provide us a lot of data that will help us throughout the country.

I do have just one more comment, Senator, and that is to assure the committee that all of these reductions are being done through attrition throughout the United States. There is no indication that we will have any kind of reduction in force.

Thank you.

TELEPHONE HANG-UP RATES

Senator DOMENICI. Well, I just want to repeat that we have visited and reviewed the Albuquerque office, and I think my statement is correct. The loss of one staff person would result in a 25-percent hang-up rate. Their goal is to hold it below 15 percent, and I do hope that you will look at that. If this is going to be one of the model offices, it ought to teach us something.

TRAINING OF CLAIMS REPRESENTATIVES

My last question is a very simple one. If you are not aware of this, I hope you will check it out because I think it is true. The training of claims representatives for these new systems is taking longer per person than you anticipated, and I think that might have an impact on your request for funding.

So my question is if that is the case, is this reflected in your 1988 budget request. If you do not have the answer now, I would appreciate it for the record, because we do not want to find ourselves with a reduced request based upon our anticipation that you can maintain the schedule when as a matter of fact you cannot, and we may have a year's lag time in terms of getting the job done.

Ms. HARDY. I would expect that the budget does reflect that. We have gone over the budget carefully, but I have not, in the training centers that I have been in and visited with employees, found that to be the case. So I need to look at the whole training situation as to whether it really is taking longer or if that is just an exception or a few exceptions.

Senator DOMENICI. Thank you very much.

Thank you, Mr. Chairman.

[The information follows:]

TRAINING FOR CLAIMS MODERNIZATION

The Social Security Administration's [SSA] training schedule is directly responsive to the terminal installation schedule. In field offices, prior to terminal installation, several employees who have been selected as instructors receive special training at their regional training center. They then return to their office, which has received terminals in their absence, and begin training the employees of that office. The training for an individual office is scheduled and monitored by the office management, consistent with efficiency of training and service to the public. The training course for claims representatives lasts approximately 80 hours. Other technical, supervisory, and clerical employees will receive training, requiring less hours to complete, to the extent necessary for their jobs.

The full-scale terminal installation began in February of this year. Under the implementation schedule, and, therefore, the training schedule, 60 offices will receive terminals every month. From January to June of this year, approximately 6,000 field office employees will be trained. (Several hundred employees were trained in 1986 as part of the startup and pilot activity.) At the scheduled pace, all field employees will be trained upon completion in 1988 of the terminal installation.

In addition, all eight of SSA's processing centers [PC] are scheduled to receive their terminals starting in June or July of this year. On an average, there are approximately 1,300 employees in each PC to be trained, resulting in 10,400 employees being trained in 1987. The training course for claims authorizers lasts approximately 50 hours. Other employees will receive training, requiring less hours to complete, to the extent necessary for their jobs.

It is true that we have budgeted for this training on the assumption that the training course will take fewer hours to complete. However, as we reassess our needs for fiscal year 1988, in the development of SSA's fiscal year 1989 budget request, we will incorporate actual experience with training time into our revised estimates, along with all the other changes—plusses and minuses—that become necessary. We are confident that, overall, our fiscal year 1988 budget request will be sufficient to fund our needs.

SHORTAGES OF SUPPLIES

Senator CHILES. Again, a concern we have, and this is kind of ironic, that to save money you are going to cut the staff by 20,000 people by 1992, and you are telling us that you are going to do that by attrition. I think the concern we have is, regardless of attrition or not, if that is going to make service worse then we do not think that is a very wise move to do.

This year, you have slashed your administrative costs by about 47 percent, as I understand, in the offices, and we understand that today you have problems of having insufficient funds to provide enough forms and envelopes, pencils, paper for employees in many offices.

We have been told that the budget for interpreters for deaf clients has been cut by 30 percent. The deaf will have to provide their own interpreters or have impaired communications.

Offices in California have no money to give Medicare handbooks to people. Public service pamphlets are about to run out. Employees in San Diego have been told not to make home visits to any clients; thus no service can be provided to disabled and shut-in clients.

Given the fact that you have transferred $18 million from part of this buildup in funds, this $200 or $300 million that you have, and you are doing that for your salaries, why did you not transfer some of those funds rather than slash these administrative services 47 percent?

Mr. SABATINI. Senator, when the Congress was considering our 1987 appropriation, one of the things that we asked they consider would be to allow us to deal with the reduction in the appropriation of $171 million by allowing us to prorate some portion of that between the two accounts.

We did not object to the reduction that was being taken, but we asked is there some way you can allow us to prorate and take some of that $171 million from the systems account, where we talked about the balances, and some of that portion from the non-ITS side. You determined that you could not do that, that it had been agreed upon prior to conference, and it was not conferenceable.

Now, in dealing with reductions and having the reductions all come out of the nonsystems side of the budget, one of the things that we have been committed to right along is that there will not be a RIF and there will not be a furlough in the Social Security Administration; therefore, our salary costs are relatively fixed costs.

The other costs that are fixed are things like rent, utilities, and postage costs. So what we have available in the non-ITS portion of the budget that you can categorize, if you will, as discretionary, is really a very, very small portion of the whole $4 billion in the administrative account. It is such things as travel, some training. We are committed to not reducing the training needed for the claims modernization effort, so that some portions of that account got hit inordinately high. That is what the 47-percent reduction reflects.

DEALING WITH FISCAL YEAR 1987 FUNDING LIMITATIONS

We are confident, and I think that the fiscal year is about one-half over and I think the GAO report supports our confidence, that we can deal with these reductions and absorptions without a deterioration in either the quality or the level of service that we are providing for the beneficiaries in this country.

There are problems, and one of the things that we have had to do is to dig into inventories deeper than we would like to do. There have been some imbalances in terms of the distribution of supplies. Those are leveling out.

We can make it through 1987. It is going to be difficult, but we can make it through 1987 staying within the outlay targets that both the executive and legislative branch are trying to stay within. It would not be a good practice to continue to indefinitely beyond 1987, but we can make it through 1987. We are confident that we can make it, and as I said I think all the evidence that we have that is available thus far shows that service is not deteriorating.

Senator CHILES. It looks like regardless of what happened in October, you have seen fit to ask for an $18 million transfer from this surplus to take care of the salary situation, so you certainly could have asked for more to take care of some of this cut in overhead costs if you had seen fit to do that.

Mr. SABATINI. We saw fit to ask for the $18 million. The committee has helped us on two counts. One, there was a redefinition problem that allowed us to pay some line charges that had not been moved over into the systems portion of the budget. That was $17 million. We have asked for a no dollars supplemental, if you will, for an additional $18 million to deal with pay costs and things like that.

We are as concerned with staying within the outlay targets that are established for 1987 as you gentlemen were when you passed the appropriation.

GAO SURVEY ON SERVICE

Senator CHILES. Well, the GAO sample survey from 1984 revealed about one-half of the disabled visitors to SSA offices had to wait more than one-half an hour to be served. One-third of all visitors had to wait more than one-half an hour.

Now, the new survey taken in 1986 shows about the same picture. Although your figures purport to show less trouble with waiting times than GAO's figures, the GAO new report states that estimates of waiting times are understated because of certain SSA sampling and receptioning procedures and practices.

Now, the GAO report makes it clear that during the time the sample is taken that the field offices are taking special measures to reduce waiting times. Obviously that distorts the results to show a small waiting time.

Similarly, the first year report found that one-quarter of the people who telephoned SSA had to call at least three times before they could get through. One-half the people had to call at least twice. The new figures show about that same record, I understand.

Are these waiting times and service, getting through on the telephone, acceptable to you, Ms. Hardy?

Ms. HARDY. I believe on the telephone service, Mr. Chairman, that we have an opportunity here and an obligation as well to work with the equipment, work with better service in terms of how we distribute in the teleservice centers. We are looking at different ways of delivering service as well.

You do not wait when you have an appointment. You get appointments and you use appointments. That is a fairly new thing for Social Security throughout the district offices.

I think as we settle through trying to figure out how best to serve the public in a modern environment and use the computer and have the claims modernization terminals up in the district offices that we will see tremendous improvements.

I would also like to clarify that all of the discussion about staffing reductions is not a 1-to-1 correlation with computerization. It is a help. It is something that we are definitely counting on, and we are pushing ahead; but the agency needs to be far more productive. We have one region in the country that if we have everybody come up to that region's productivity, we would be absolute wizards and we would be really good.

We have disparities throughout our regions. The people that you talk about in San Diego, southern California, I was out there. I talked to them, and I talked to the staff. I believe that in talking to the managers as well as the staff that, yes, employees are saying we have some problems in terms of supplies. We have been able to move things around, whether it is in southern California or elsewhere.

I think it is working. I think we are providing good service, and we are doing it within the constraints of a very tight budget. Frankly, the Social Security Administration has never had a very tight budget.

Senator CHILES. I understand some of those offices had to mail supplies from one office to another because they were running out of supplies.

Mr. SABATINI. We have had to redistribute some of the inventory.

Ms. HARDY. That is true.

Senator CHILES. I will bet it is not happening up here.

Mr. SABATINI. I think if you came to visit us in Baltimore, you would be very surprised to see that the same thing is happening at headquarters.

Senator CHILES. Well, it is one thing as to what the most modern offices have. It is another as to what kind of level of service is out there.

RESPONSE TO GAO REPORTS

Ms. Commissioner, many issues have been raised today as a result of the GAO reports and the documents presented. I would like to ask you if you would give us a complete analysis of these findings.

Ms. HARDY. I will be glad to.

Senator CHILES. If we can get that within the next 3 or 4 weeks, then we will determine whether we need to go into this matter again, and we thank you for that.

Ms. HARDY. Thank you, Mr. Chairman.

Senator CHILES. I want to thank GAO for their services which they rendered to us in their report.

[The information follows:]

COMMENTS OF THE DEPARTMENT OF HEALTH AND HUMAN SERVICES ON THE GENERAL ACCOUNTING OFFICE REPORT, "ADP BUDGET: SSA'S INFORMATION TECHNOLOGY SYSTEMS BUDGET REQUESTS AND OBLIGATIONS" (GAO IMTEC-87-15FS)

General Comments

--The General Accounting Office (GAO) report makes two major points:

- o The Social Security Administration (SSA) has carried over significant amounts of information technology systems (ITS) funds; and
- o SSA has used significant amounts of ITS funds for unbudgeted projects.

--On the first point, we agree. In recognition of this fact, SSA has reduced its budget request for new ITS budget authority from $225.4 million in fiscal year (FY) 1987 to $165.4 million in FY 1988.

--On the second point, GAO is mistaken for several reasons:

- o GAO has not taken into consideration the operating year revisions to each SSA budget request (i.e., the changes to FY 1987 in the FY 1988 budget).
- o GAO has not taken into consideration the difference between budget authority and obligations.
- o GAO has not taken into consideration the fact that SSA's ITS budget as presented to and approved by Congress is not on a project-by-project basis. The Office of Management and Budget's (OMB) required 43B exhibits only contain projects over $1 million over their life cycle.

--GAO misreads OMB's Circular A-11 requirements and what SSA submitted to OMB based on those requirements. OMB requires two basic types of material:

- o A 43A exhibit, summarizing total ITS obligations, including estimates of personnel, space and site preparation that are not part of SSA's ITS earmark in the Limitation on Administrative Expenses account; and
- o 43B exhibits for each major acquisition of equipment or services that exceeds $1 million in obligations over the 5-year budget period.

--Contrary to GAO's assertion, SSA did submit to OMB 43B exhibits that covered the acquisition of certain automated data processing/ telecommunications commercial services as well as capital investments that exceeded OMB thresholds. Also contrary to GAO's assertion, personnel costs were addressed, as required, in the 43A exhibits.

--The GAO report's concept of unbudgeted obligations and unbudgeted carryover is not consistent with HHS & OMB interpretations of SSA ITS budget requests. For example, it is incorrect to assume that any project not requiring a 43B exhibit was an "unbudgeted" item. Budget projects that are under the OMB threshold required no 43B exhibits.

--In its tables, GAO mistakenly combines SSA internal component ITS procurement records with official SSA budget submissions and SSA financial accounting records. This results in an

inconsistent presentation and, in key instances, incorrect figures.

--GAO prepared its charts based on a misreading of SSA's budget submissions each year as well as changes from year to year. For example, GAO's FY 1987 column represents the FY 1987 President's budget, not the 1987 column of the FY 1988 budget. This manner of display means that SSA's revisions to the ITS operating budget in each subsequent year are not accurately reflected. Also, it contributes to inaccurate estimates of budgeted funds, especially in GAO's chart 8 (total budgeted funds, FY 1983-1987).

Comments on the GAO Charts

The following comments refer to the charts contained in the Appendix section of the GAO report. Attached at tabs A, B, and C are tables, listings, and documents referred to in our comments.

Chart 1

--GAO's depiction of the annual "funds available" (shown here and on charts 3 and 4) is not accurate because it does not reflect some ITS resources such as transfers and reprogramming, Gramm-Rudman sequestrations, recoveries of prior year obligations and reimbursables earned. The attached table (tab A) shows SSA's total ITS resources and actual obligations by fiscal year.

--GAO's classification of budgeted and unbudgeted carryover cannot be verified by SSA.

Chart 2

--The FY 1985 "budgeted" carryover ($31 million) on GAO's table is not an SSA budget figure. SSA's annual budget requests to Congress showed no projected carryovers until the FY 1986 budget.

Chart 3

--GAO's chart of "budgeted obligations" for the Systems Modernization Plan (SMP) does not correspond to SSA budget submissions, either for the budget year or the operating year columns of SSA budget submissions. (See tab B for lists of ITS projects for the FY 1986, 1987, and 1988 budget requests.) For example, GAO shows an estimate of $209 million for budgeted SMP obligations in FY 1987. Neither of SSA's last two budget requests to Congress shows this amount. The FY 1987 President's budget, submitted in January 1986, estimated FY 1987 SMP obligations of $190.7 million. The FY 1987 column of the FY 1988 President's budget, submitted this year, estimated FY 1987 SMP obligations at $129.4 million.

--Total funds available are not accurate, as we described above in the comments on chart 1 (see tab A). In particular, they do not reflect the fact that SSA projects a carryover of $116.4 million in FY 1988. SSA's FY 1988 request for new budget authority was reduced based on this projected carryover.

Chart 4

--This chart's actual obligations are not correct--they do not agree with official SSA accounting records. Tab A shows actual ITS obligations, FY 1982-1987.

--GAO's total estimated ITS obligations for FY 1987 are shown as $285 million. Neither the FY 1987 budget request ($342.4 million) nor the FY 1987 column of the FY 1988 budget request ($304.8 million) ties to GAO's total.

--GAO's annual "funds available" are inaccurate (see our comment above on chart 1).

Chart 5

--This chart's actual obligations for the SMP do not agree with SSA's final FY 1985 and FY 1986 ITS reports to OMB (tab C). GAO's FY 1987 estimated actual SMP obligations do not agree with the current estimate in the FY 1988 budget or to the original FY 1987 budget estimate (tab B). SSA has been unable to identify with certainty where GAO obtained this estimate.

--GAO's "budgeted" obligations do not correspond with any SSA budget requests (see our comments above on chart 3).

Chart 6

--For FY 1985-1987, neither budgeted nor actual obligations (except FY 1986 "actual") agree with SSA budget estimates or to the final FY 1985/1986 ITS reports to OMB (see our comments above on chart 5).

Chart 7

--The chart's total ITS obligations do not agree with SSA's actual ITS obligations (tab A) or to GAO's chart 4 (which also shows ITS "actual").

--SSA is unable to verify GAO's split between budgeted and unbudgeted obligations. GAO definitions appear to ignore the existence of an operating budget, as well as any items not requiring 43B exhibits (under $1 million over the life cycle).

Chart 8

--This chart's total "budgeted" funds for FY 1983-1987 total $1,227 million. Actual ITS resources available to SSA in that period, including new budget authority, transfers, recoveries, etc., total $978 million (see tab A). GAO added up total requests for each budget year (including carryovers) but did not allow for changes in SSA budget plans in the subsequent year's operating budget columns (i.e., GAO did some double counting).

--GAO shows actual obligations (1983-1987) totaling $831 million (including an incorrect FY 1987 estimate of $285 million). SSA accounting records show actuals for that period of $872 million (including a FY 1987 estimate of $304.8 million in the FY 1988 budget).

Chart 9

--SSA's budget staff will be meeting shortly with GAO's auditors to determine the basis for this chart's total budgeted funds column.

--These problems of fact might have been avoided had GAO checked their data with SSA prior to release. SSA budget personnel will meet shortly with GAO, to determine how the amounts shown in the report's charts were derived.

Information Technology Systems (ITS) Funding, Fiscal Years (FY's) 1982-1987
Limitation on Administrative Expenses (LAE) Account
($ 000)

	New Budget Authority	Adjustments to Budget Authority	Carryover from Prior Year	Other Sources of Funding 1/	Total Resources Available	Actual Obligations	Carryover to Following Year
FY 1982.....	$123,436	--	--	--	$123,436	$112,575	$10,861
FY 1983.....	151,625	--	$10,861	$2,707	165,193	124,110	41,083
FY 1984.....	200,054	--	41,083	9,156	250,293	126,153	124,140
FY 1985.....	210,166	+$10,000 2/	124,140	2,910	347,216	130,113	217,103
FY 1986.....	182,939	-12,272 3/	217,103	12,997	400,767	186,922	213,845
FY 1987.....	225,398	-18,000 4/	213,845	--	421,243	304,806 (est)	116,437 (est)

1/ Other funding includes recovery of prior year obligations and reimbursables earned.
2/ Transferred from construction account.
3/ Sequestration of funds under Gramm-Rudman.
4/ Proposed transfer to 1-year LAE account (included in FY 1988 budget request).

Total ITS Resources, FY 1982-1987*
($ 000)

New Budget Authority.....	$1,093,618
Adjustments.....	-20,272
Other.....	27,770
Total Resources, FY 1982-1987.....	$1,101,116
Total Obligations (Including Estimate for FY 1987)..	-984,679
Estimated Carryover to FY 1988.....	$116,437

* The following numbers are comparable to the General Accounting Office's presentation (FY 1983-1987):

Total Resources, FY 1983-1987.....	$977,680
Total Obligations (Including FY 1987 Estimate).....	872,104

FY 1987/FY 1988 ITS Budget Request
Total ITS Obligations By Project - $ in Millions
(totals may not add due to rounding)

All Programs

	FY 1987 Estimate	FY 1988 Request
Systems Modernization Plan		
Software Engineering Program		
Processing Center Control System (PCCS) Software Development	$2.4	—
Processor Software Tools	1.9	$1.8
Data Exchange System	—	3.5
Program Benefits Logical Application Group (LAG)	2.2	2.2
Quality Assurance and Internal Audit LAG	—	3.0
Projects Under $1 million	1.1	1.3
Subtotal	$7.6	$11.8
Data Base Integration Program		
Data Base Architecture and Management System	$1.1	$0.6
Subtotal	$1.1	$0.6
Data Communications Utility (DCU) Program		
DCU	$0.8	$1.1
Terminal Acquisition Project	2.7	20.2
Terminal Installation	3.7	4.0
Projects Under $1 Million	0.3	0.3
Subtotal	$7.5	$25.6
Capacity Upgrade Program		
PSC Hardware Replacement	$4.9	$1.1
Disk Capacity Increase	8.5	4.1
Telecommunications Host Acquisition	29.1	2.4
Programmatic Host Upgrade	2.0	0.1
Magnetic Tape Subsystem	4.9	3.4
Test and Timesharing Facility Replacement	2.0	9.0
PCCS Terminals	—	10.3
AWR Enhancements	5.5	0.2
Printer Project	0.1	3.7
Mass Storage System for AMDAHL Processors	1.4	0.1
Projects Under $1 Million	—	1.5
Subtotal	$58.4	$35.8
System Operation Management Program		
Systems Engineering Services	$3.4	$1.6
Projects Under $1 Million	0.5	0.3
Subtotal	$3.9	$1.9
Management Initiatives		
Integration and Management Contractor Support	$6.2	$5.5
Projects Under $1 Million	1.0	1.0
Subtotal	$7.2	$6.5
Administrative/Management Information Engineering (AMIE)		
OHA Automation	$1.3	$2.8
DCMA Office Automation	4.0	1.2
DCPP Office Automation	0.9	6.1
Personal Computers for OCO	3.6	0.4
DCS Office Automation	6.4	7.0
Software Engineering Services - GSA - Region III	2.6	1.9
Management Information for Decisionmaking	2.2	1.8

	FY 1987 Estimate	FY 1988 Request
Microcomputers for Operations (MOP) (Formerly FOSE End User Computing)	17.9	7.1
MOP Local Area Network (LAN)	--	3.1
Information Management System	1.1	--
Conversion of CSC Systems	--	2.0
Conversion of UNIVAC Software	--	2.8
Teleprocessing Services	2.3	1.5
Projects Under $1 Million	1.5	0.5
Subtotal	$43.7	$38.1
Total, Systems Modernization Plan	$129.4	$120.4
Other ITS Projects		
Interim Billing and Followup System	$1.4	--
Tape Rehabilitation Facility	1.2	$0.7
Laser Disk Pilot	--	1.0
Cost Effective Measurement System (CEMS)	2.2	0.4
Equipment for the Visually Impaired	4.3	0.4
Other Projects Under $1 Million	10.6	7.2
Ongoing Lease, Maintenance and Supplies	70.2	59.4
Total, Non-SMP	$89.9	$69.1
Total ADP/Telecommunications	$219.3	$189.6
Telephone Systems		
Telephone System Procurements:		
Program Service Centers	$2.5	$4.8
Data Operations Centers	0.7	0.8
State System Purchases	6.1	5.8
Teleservice Centers	3.0	1.2
Continuation of Service Contracts	5.0	1.0
Washington Interagency Telephone System	--	2.6
Other Procurements	1.0	1.4
Maintenance	1.6	4.9
Service Observation	--	1.9
Federal Telecommunications System (FTS) Charges	17.1	17.1
Lease and Usage Cost to GSA and Vendors	49.6	51.9
Total, Telephone Systems	$86.6	$93.4
Total ITS Obligations	$306.0	$283.0
Less Non-LAE Obligations	-1.2	-1.2
Total LAE Obligations	$304.8	$281.8

FY 1986/1987 President's Budget
Total ITS Obligations By Project - $ in Millions
(totals may not add due to rounding)

	FY 1986 Estimate	FY 1987 Request
Systems Modernization Plan		
Software Engineering Program		
AWR Redesign	$ 1.2	$ 1.9
Software Improvement Project	0.7	3.1
Claims Modernization	4.1	--
Processor Software Tools	2.2	1.6
Data Exchange System	0.9	--
Program Benefits Logical Application Group (LAG)	--	6.7
National Debt Management System (NDMS)	1.2	--
Inquiry Response LAG	1.0	--
Projects Under $1 million	0.6	--
Subtotal	$ 11.9	$ 13.3

	FY 1986 Estimate	FY 1987 Request
Data Base Integration Program		
Data Base Architecture and Management System	$ --	$ 9.1
Subtotal	$ --	$ 9.1
Data Communications Utility (DCU) Program		
DCU/Terminal Acquisition Project	$ 43.6	$ 66.9
Terminal Installation	7.0	--
Subtotal	$ 50.6	$ 66.9
Capacity Upgrade Program		
PSC Hardware Replacement	$ 21.6	$ 6.1
Disk Capacity Increase	1.0	10.0
Telecommunications Host Acquisition	1.0	34.5
Programmatic Host Upgrade	1.7	1.7
Magnetic Tape Subsystem	--	12.0
Solid State Paging Devices	3.1	1.8
Test and Timesharing Facility Replacement	--	6.9
Projects Under $1 Million	1.6	2.5
Subtotal	$ 30.0	$ 75.5
System Operation Management Program		
Systems Engineering Services	$ 4.6	$ 1.7
Tape Allocation Equipment Replacement	1.1	0.1
Integrated Performance Management System	--	1.5
Projects Under $1 Million	0.4	0.2
Subtotal	$ 6.1	$ 3.5
Management Initiatives		
Systems Engineering and Integration Contractor	$ 6.4	$ 5.0
Transition to New SMP Equipment	3.3	1.1
Projects Under $1 Million	0.6	0.7
Subtotal	$ 10.3	$ 6.8
Administrative/Management Information (AMIE)		
Admin/MI Computer Replacement	$ 0.9	$ 2.0
Timesharing Services	3.0	3.2
OHA Automation	2.7	1.4
Other Office Automation Projects	3.9	1.9
Cost Effective Measurement System	1.7	0.5
Software Engineering Services - GSA	2.0	1.6
Local Area Network	1.0	--
Management Information for Decisionmaking	2.0	1.0
FOSE End User Computing (including personal computers for field offices)	24.4	0.7
Projects Under $1 Million	3.7	3.3
Subtotal	$ 45.3	$ 15.6
Total, Systems Modernization Plan	$154.2	$190.7
Other ITS Projects		
Interim Billing and Followup System	$ 2.2	$ 1.5
Tape Rehabilitation Facility	1.4	1.4
Assistive Devices for the Handicapped	0.5	0.4
Other Projects Under $1 Million	8.6	6.5
Ongoing Lease, Maintenance and Supplies	58.1	59.9
Total, Non-SMP	$ 70.8	$ 69.7
Total ADP/Telecommunications	$225.0	$260.4
Telephone Systems		
Telephone System Procurements:		
Western Program Service Center (PSC)	3.5	--
Headquarters	18.0	--
Northeastern PSC	3.5	--
Southeastern PSC	3.5	--
Mid-Atlantic PSC	3.5	--

	FY 1986 Estimate	FY 1987 Request
Telephone Systems		
Mid-America PSC	--	3.5
Great Lakes PSC	--	3.5
Wilkes-Barre Data Operations Center	--	1.0
State System Purchases	2.7	11.1
Others (Under $1 Million)	14.9	11.2
	$ 49.6	$ 30.3
Redefinition of ITS to Include Lease and Maintenance in FY 1987	(49.2)	51.7
Total, Telephone Systems	$ 49.6	$ 82.0
Total ITS Obligations	$274.6	$342.4
Less Non-LAE Obligations	- 1.5	- 2.3
Total LAE Obligations	$273.1	$340.0

FY 1986 President's Budget
ITS Obligations by Project ($ in millions)
(totals may not add due to rounding)

	FY 1985 Current Estimate	FY 1986 Estimate
Systems Modernization Plan		
Software Engineering Program		
Application Area Architecture	$13.5	$4.7
Program Center Software Replacement	4.0	--
Transitional Software Development	--	2.0
Claims Modernization	4.3	2.2
National Debt Management	3.3	3.1
Other Software Improvement Projects	2.3	2.5
Program Subtotal	$27.4	$14.5
Data Base Integration Program		
Data Base Architecture	$12.0	$0.3
Disk Capacity Increase	17.4	9.1
Other Data Base Projects	0.9	1.3
Program Subtotal	$30.3	$10.7
Data Communications Utility Program		
Data Communications Utility	$7.3	$3.5
Terminal Acquisition	3.6	13.1
Program Subtotal	$10.9	$16.6
Capacity Upgrade Program		
Program Service Center Hardware	--	$23.7
AWR Redesign Hardware	--	29.6
Code Compatible Processor Upgrade	$8.9	0.3
Printer Project	2.7	1.0
Solid State Paging Devices	3.0	1.5
Other Capacity Upgrade Projects	2.6	6.0
Program Subtotal	$17.2	$62.1
System Operations Management Program		
Systems Engineering Services	$4.3	$4.2
Other SOMP Projects	0.2	--
Program Subtotal	$4.5	$4.2

	FY 1985 Current Estimate	FY 1986 Estimate
Management Initiatives		
Systems Engineering and Integration Contractor	$7.0	$6.0
Transition to New SMP Equipment	4.2	0.5
Other MI Projects	0.4	0.2
Program Subtotal	$11.6	$6.7
SMP Subtotal	$101.9	$114.8
Other ITS Projects and Ongoing Costs		
Management Information Projects	$10.5	$17.0
Interim Billing and Follow-up System	2.3	1.2
Office Automation Projects	18.4	14.2
ARS Termination Liability	6.1	--
Magnetic Tape Replacement/ Rehabilitation	2.0	2.2
FEDSIM Services	1.5	0.2
Timesharing Services	3.0	3.0
Other ITS Projects	24.1	20.0
Ongoing Lease, Maintenance, Supplies	55.5	50.4
Subtotal, Ongoing and Other	$123.4	$108.2
Subtotal, ADP/Telecommunications	$225.3	$223.0
Telephone Systems Procurements and Maintenance	40.9	43.3
Total ITS Obligations	$266.2	$266.3

Memorandum

FM-5

NOV 29 1985

Director
Office of Financial Resources, OMBP

Final Update of Information Technology Systems Spending Plans for FY 1985--INFORMATION

Acting Deputy Assistant Secretary
for Budget

Attached to this memorandum (at tab A) is our final report on FY 1985 Information Technology Systems (ITS) expenditures compared to original plans. Included are a table listing all projects exceeding $1 million and a narrative explanation of each change greater than 10 percent and $500,000 since the last report in August. For those projects that have potential impact on major Systems Modernization Plan milestones (e.g., Data Communications Utility), we have included a statement of effect, as requested in David Kleinberg's September 5, 1985 memorandum (tab B). We will be preparing the first report for FY 1986 (based on the operating budget) when final decisions are made on the FY 1986/1987 budget.

Please forward the list of projects and explanations to the Office of Management and Budget after your review. If members of your staff have any questions, please have them call Phil Kelly on FTS 987-1839.

Sherwin T. Montell

Information Technology Systems--FY 1985 Budget Plans

Projects	Operating Budget	April Update	July Update	FY 1985 Actual	Change from last Report	
Systems Modernization Plan:						
Application Area Architecture	$13,500,000	$13,050,000	$10,467,000	$ 5,844,000	-$ 4,623,000	1/
Processing Center Software Replacement	4,000,000	3,785,000	3,785,000	3,116,000	- 669,000	2/
Realignment of Applications Software	1,400,000	1,435,000	35,000	155,000	+ 120,000	
Claims Modernization Project	4,317,000	4,385,000	595,000	493,000	- 102,000	
National Debt Management System	3,300,000	2,500,000	4,318,000	3,087,000	- 1,231,000	3/
Data Base Architecture	12,010,000	11,835,000	25,000	25,000	-0-	
Disk Capacity Increase	17,419,000	10,138,000	10,138,000	10,035,000	- 103,000	
Data Communications Utility	7,295,000	1,288,000	1,671,000	439,000	- 1,232,000	4/
Terminal Acquisition Project	3,639,000	-0-	-0-	-0-	-0-	
Printer Project	2,698,000	2,389,000	2,358,000	2,358,000	-0-	
Code Compatible Processor Upgrade	8,916,000	1,604,000	1,708,000	933,000	- 775,000	5/
Test and Time Sharing Facility and Production System Paging Devices	3,000,000	-0-	-0-	-0-	-0-	
FEDSIM Services	-0-	1,500,000	1,500,000	1,500,000	-0-	

Projects	Operating Budget	April Update	July Update	FY 1985 Actual	Change from last Report	
Systems Engineering Services	4,308,000	4,298,000	3,098,000	2,238,000	- 860,000	6/
Systems Engineering and Integration Contractor	7,000,000	7,000,000	7,000,000	6,623,000	- 377,000	
Transition to New SMP Equipment	4,200,000	2,998,000	3,001,000	3,001,000	-0-	
Other SMP Projects (under $1 million)	4,912,000	4,182,000	3,888,000	2,212,000	- 1,676,000	7/
Subtotal, SMP	$101,914,000	$72,387,000	$53,587,000	$ 42,059,000	-$11,528,000	
Ongoing and Other ADP Plans:						
Interim Billing and Followup System	$2,300,000	$2,700,000	$2,570,000	$ 2,070,000	-$ 500,000	8/
Financial/Administrative Integrated Management System	1,000,000	580,000	279,000	63,000	- 216,000	
End User Microcomputers	3,000,000	3,000,000	3,000,000	2,122,000	- 878,000	9/
Local Area Network	2,000,000	2,000,000	398,000	-0-	- 398,000	
DBMS Software and Support	1,000,000	500,000	-0-	-0-	-0-	
Mini/Micro Software	1,000,000	1,000,000	111,000	104,000	- 7,000	
Admin/MI Business Systems Planning (BSP)	2,000,000	2,000,000	-0-	-0-	-0-	
Magnetic Tape Replacement/ Rehabilitation	2,009,000	2,009,000	2,417,000	2,417,000	-0-	
FEDSIM Services	1,500,000	-0-	-0-	-0-	-0-	
ARS Termination Liability	6,147,000	6,147,000	6,147,000	6,147,000	-0-	
Teleprocessing Services	3,000,000	2,750,000	2,230,000	2,325,000	+ 95,000	

Projects	Operating Budget	April Update	July Update	FY 1985 Actual	Change from last Report	
Office Automation Projects.....	18,400,000	10,704,000	9,660,000	8,272,000	- 1,388,000	10/
Xerox 9700 System.....	2,046,000	1,917,000	1,205,000	1,205,000	-0-	
Ongoing Lease, Maintenance and Supplies.....	55,488,000	61,756,000	59,016,000	55,497,801	- 3,518,199	11/
Other Projects (under $1 million).....	22,536,000	10,961,000	10,121,000	6,128,000	- 3,993,000	12/
Subtotal, Ongoing and Other ADP.....	$123,426,000	$108,024,000	$97,154,000	$ 86,350,801	-$10,803,199	
Telephone System Procurements.....	$40,894,240	$20,125,000	$ 4,817,825	$ 2,355,125	-$ 2,462,700	13/
Total ITS Obligations (All Programs).....	$266,234,240	$200,536,000	$155,558,825	$130,764,926	-$24,793,899	

Explanation of Changes Exceeding 10 Percent and $500,000

1/ Application Area Architecture--Lower amount was caused by two contract awards:

- Award for Program Benefits requirements analysis and functional design was lower than estimate (-$3.6 million);
- Award for Quality Assurance functional requirements was lower than estimate (-$1.0 million).

2/ Processing Center Software Replacement--Award for this software was lower than estimate.

3/ National Debt Management Syster (NDMS)--This item was increased in the July update to include revised functional requirements. That part of the project has now been deferred to 1986. Because this procurement is a continuation of the existing contract, which is adequately funded, the impact of deferral on the NDMS is minimal.

4/ Data Communications Utility (DCU)--Lower amount is due to the deferral of five minor procurements. Their delay has not affected any major milestones for the DCU project.

5/ Code Compatible Processor Upgrade--This award was deferred to FY 1986 when it became clear there was not enough time to install, shake down and test the processors before the heavy November workload (Benefit Rate Increase). This contract option will be exercised before March 1986.

6/ Systems Engineering Services--The anticipated workload for which this project was budgeted did not materialize.

7/ Other SMP Projects (Under $1 Million)--This represents a number of smaller projects. The lower amount is caused by deferrals, cancellations and awards that were less than estimates. These changes do not affect any major SMP milestones.

8/ Interim Billing and Followup System--This award was lower due to a refinement of the estimates.

9/ End User Microcomputers--The lower cost is a combination of reduced requirements and the lower cost achieved through a consolidated buy rather than a number of smaller procurements.

10/ Office Automation Projects--About one-third of the lower cost was a result of awards that were less than estimates. The other two-thirds resulted from deferrals to FY 1986. The deferred projects include the Office of Assessment Data Access System, Phase II of the ODCPP Office Automation Project and the System for Engineering and Automating Tasks project. The deferral of these projects do not affect any major SMP milestones.

11/ Ongoing Lease, Maintenance and Supplies--The lower cost for this group of items includes:

- The effect of additional lease-to-purchase conversions and the completion of lease-to-ownership contracts.
- An over estimation of the cost of stand-alone word processing equipment which was recently redefined as part of the ITS budget.
- Further reduction in the cost of ADP inventory supplies because of GSA customer supply centers in the regions.
- A reduction of small purchases compared with base year (1984) used for estimating these costs.

12/ Other Projects (Under $1 Million)--This decrease is a combination of cancellations, deferrals and awards that were lower than estimates. Included among the deferrals are:

- Centennial Disk project was deferred pending a decision on how long the Univac mainframe will be retained ($328K).
- The purchase of laser printers for the Univac was deferred pending the decision on replacement of the Univac ($413K).
- The Earnings Record Control System and the SSI Folder Control System were deferred because of procurement delays. They should be early FY 1986 awards ($548K).
- Acquisition of digital circuits for trunk net was deferred because of negotiations with the vendors ($685K).
- Word processors for ODO required an amended Delegation of Procurement Authority which caused a deferral to FY 1986.

13/ Telephone System Procurements--Lower costs are due to the deferral of the Western Program Service Center system to FY 1986, offset partly by higher costs for individual field office system purchases.

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF MANAGEMENT AND BUDGET
WASHINGTON, D.C. 20503

September 5, 1985

MEMORANDUM FOR DAVID DUKES

FROM: DAVID KLEINBERG

SUBJECT: LIMITATION ON ADMINISTRATIVE EXPENSES ITS APPORTIONMENT

Attached is the apportionment for the Information Technology Systems (ITS) activity within SSA's Limitation on Administrative Expenses, which we have approved as requested.

We continue to be concerned about slippage in the obligations of funds for ITS projects, which have caused the large carry-over balances in the last three fiscal years. As you know, these projects are an integal part of the ongoing modernization effort within SSA, which is one of the Acting Commissioner's highest priorities.

As requested, we have received updates to the ITS financial plan describing the amounts and reasons for deviations in the financial plan. However, these updates have not made clear the effect of these deviations from the financial plan on major "milestones" in the SMP. Please provide this information in future updates.

Please contact my staff if there are any questions.

Memorandum

December 29, 1986 FM-5

Acting Director
Office of Financial Resources, OMBP

Final Update of Information Technology Systems Spending Plans for Fiscal Year 1986--INFORMATION

Deputy Assistant Secretary
for Budget

Attached to this memorandum (at tab A) is our final report on fiscal year (FY) 1986 Information Technology Systems (ITS) expenditures compared to original plans. Included are a table listing all projects exceeding $1 million and a narrative explanation of each change greater than 10 percent and $500,000 since the last report in June. A summary of the reasons for change between planned and actual ITS obligations for FY 1986 is attached at tab B.

Please forward the list of projects and explanations of change to the Office of Management and Budget after your review. If members of your staff have any questions, please have them call Phil Kelly on FTS 987-4565.

Louis R. Ponsi

Attachments

80-149 O - 87 - 11

Information Technology Systems (ITS)--FY 1986 Budget Plans

Projects	Original Operating Budget	Revised Operating Budget	April Update	FY 1986 Actual	Change From Last Report	
Systems Modernization Plan:						
AWR Redesign (hardware and software)	$64,024,000	$1,200,000	$3,601,000	$101,000	-$3,500,000	1/
National Debt Management System	1,230,000	1,230,000	1,230,000	1,230,000	-0-	
Claims Modernization	4,234,000	4,120,000	4,115,000	277,000	-3,838,000	2/
Processor Software Tools	2,152,000	2,152,000	2,139,000	1,967,000	-172,000	
Inquiry Response LAG	1,000,000	1,000,000	635,000	635,000	-0-	
Data Communications Utility/ Terminal Acquisition Project	12,176,000	43,611,000	64,148,000	49,233,000	-14,915,000	3/
Terminal Installation	2,059,000	7,000,000	7,128,000	7,052,000	-76,000	
Program Service Center (PSC) Hardware Replacement	21,517,000	21,607,000	2,755,000	2,734,000	-21,000	
Disk Capacity Increase	1,001,000	1,001,000	1,237,000	329,000	-908,000	4/
Telecommunications Host Acquisition	1,000,000	940,000	2,456,000	1,671,000	-785,000	5/
Programmatic Host Upgrade	1,704,000	1,717,000	917,000	865,000	-52,000	
Solid State Paging Devices	3,052,000	3,052,000	3,052,000	1,583,000	-1,469,000	6/
Systems Engineering Services	4,584,000	4,584,000	4,584,000	1,310,000	-3,274,000	7/
Tape Allocation Equipment Replacement	1,076,000	1,076,000	1,076,000	662,000	-414,000	
Systems Engineering and Integration Contractor	6,378,000	6,378,000	6,378,000	6,378,000	-0-	
Transition to New SMP Equipment	3,285,000	3,285,000	3,629,000	3,571,000	-58,000	
Timesharing Services	3,000,000	3,000,000	2,230,000	2,230,000	-0-	
OHA Automation	2,692,000	2,690,000	2,321,000	1,593,000	-728,000	8/
Other Office Automation Projects	3,932,000	3,946,000	3,331,000	1,389,000	-1,942,000	9/
Cost Effectiveness Measurement System	1,719,000	1,719,000	1,670,000	1,042,000	-628,000	10/
Local Area Network	975,000	952,000	861,000	429,000	-432,000	

Projects	Original Operating Budget	Revised Operating Budget	April Update	FY 1986 Actual	Change From Last Report	
Management Information for Decisionmaking.....	2,000,000	2,000,000	2,000,000	1,851,000	-149,000	
FOSE End User Computing (Microcomputers for Operations).....	9,000,000	24,392,000	-0-	-0-	-0-	
Software Engineering Services (GSA).....	2,000,000	2,000,000	1,598,000	1,479,000	-119,000	
Other SMP Projects (under $1 million).....	9,495,000	9,561,000	5,177,000	5,787,000	+610,000	11/
Subtotal, SMP.....	$165,285,000	$154,213,000	$128,268,000	$95,398,000	-$32,870,000	
Ongoing and Other ADP Plans:						
Interim Billing and Followup System.....	$2,320,000	$2,215,000	$2,215,000	$2,179,000	-$36,000	
Tape Rehabilitation Facility....	1,418,000	1,418,000	1,008,000	699,000	-309,000	
Ongoing Lease, Maintenance and Supplies.....	59,150,000	57,778,000	61,349,000	56,991,000	-4,358,000	12/
Other Projects (under $1 million).....	9,110,000	9,110,000	7,502,000	4,989,000	-2,513,000	13/
Subtotal, Ongoing and Other ADP.....	$71,998,000	$70,521,000	$72,074,000	$64,858,000	-$7,216,000	
Telephone System Procurements:						
Western PSC.....	$3,500,000	$3,500,000	$3,500,000	$1,870,000	-$1,630,000	14/
Headquarters.....	18,000,000	18,000,000	21,000,000	19,724,000	-1,276,000	15/
Northeastern PSC.....	3,500,000	3,500,000	3,500,000	-0-	-3,500,000	16/
Southeastern PSC.....	3,500,000	3,500,000	-0-	-0-	-0-	
Mid-Atlantic PSC.....	3,500,000	3,500,000	-0-	-0-	-0-	
Others (under $1 million).....	17,603,000	17,603,000	21,603,000	5,653,000	-15,950,000	17/
Subtotal, Telephone Systems...	$49,603,000	$49,603,000	$49,603,000	$27,247,000	-$22,356,000	
Total ITS Obligations (All Programs).....	$286,886,000	$274,337,000	$249,945,000	$187,503,000	-$62,442,000	

Explanation of Changes Exceeding 10 Percent and $500,000

1/ AWR Redesign—The decrease is a result of the deferral to FY 1987 of $3.5 million previously budgeted to upgrade the existing AWR system scanning equipment. It was deferred because there was not adequate time to make an award in FY 1986.

2/ Claims Modernization--The decrease is a result of the deferral to FY 1987 of two procurements providing ADP support services for Program Benefits. The delay was caused by insufficient procurement lead times and end-of-year procurement workloads.

3/ Data Communications Utility/Terminal Acquisition Project--The decrease is a result of an award at lower-than-anticipated cost.

4/ Disk Capacity Increase--SSA reconsidered its FY 1986 DASD requirements. As a result, a proposed DASD acquisition from the National Institutes of Health was cancelled. A reduced amount of DASD was procured from the Office of Child Support Enforcement and through an open market purchase.

5/ Telecommunications Host Acquisition--The memory upgrade of the two AS/9060 telecommunications processors was deferred until FY 1987 because there was not sufficient time to make an award in FY 1986.

Additional requirements for installation, maintenance and support requirements for the IBM 30840, which slightly offset this decrease, have been identified.

6/ Solid State Paging Devices--This decrease is a result of an award at lower-than-anticipated cost.

7/ Systems Engineering Services—The decrease is a result of: (1) the deferral to FY 1987 of $2.2 million previously budgeted for a software contract; and (2) an award at lower-than-anticipated cost for systems engineering services.

8/ OHA Automation—The decrease is a result of the deferral to FY 1987 of the acquisition and installation of additional storage for OHA's minicomputer workstations.

9/ Other Office Automation Projects--This decrease is largely the result of the deferral to FY 1987 of $0.8 million previously budgeted to purchase a shared logic word processing system. The remaining change is due to other small deferrals to FY 1987 and awards at less-than-anticipated cost.

10/ Cost Effectiveness Measurement System—The decrease is a result of two factors: (1) cancellation of a planned award for interim timesharing services; and (2) an award at lower-than-estimated cost. The interim services were not required once a systems support contract was awarded in June 1986.

11/ Other SMP Projects (Under $1 Million)--This change is a result of small increases, decreases and deferrals in numerous projects, including unanticipated items and awards different than estimated. For example, an interagency agreement for the consolidation of all earnings information needed for eligibility, entitlement and income verification processing was increased by $330,000. Purchase of additional processors from the National Institutes of Health led to unanticipated miscellaneous purchases ($124,000) to support them.

12/ Ongoing Lease, Maintenance and Supplies—This decrease is a result of lower-than-anticipated costs for telecommunications renewals.

13/ Other Non-SMP Projects (Under $1 Million)—This decrease is a combination of cancellations, deferrals and awards at lower-than-estimated cost.

14/ Western PSC--This increase is a result of an award at lower-than-anticipated cost.

15/ Headquarters Telephone System--This decrease is a result of an award at lower-than-anticipated cost.

16/ Northeastern PSC--This award has been deferred to FY 1987 because of continued delays in construction at the site.

17/ Other Telephone Systems--This decrease is due to awards at lower-than-anticipated cost, cancellations and deferrals. The lower-than-anticipated cost of actual awards is due to the continued effects of competitive forces in the telecommunications marketplace and our revised specifications and evaluation procedures. Much of the amount deferred to FY 1987 was due to delays in awarding contracts to purchase current systems in GSA-served offices (POTS contracts). Most of these will be purchased in FY 1987.

FY 1986 Information Technology Systems (ITS)
Actual Experience (All Programs)
($ in Millions--Total May Not Add Due to Rounding)

	ADP/Telecommunications	Telephone Systems	Total
FY 1986 Operating Budget.....	$237.3	$49.6	$286.9
Final ITS Obligations.....	160.3	27.2	187.5
Difference.....	$77.0	$22.4	$99.4

(Total includes about $581,000 for non-Limitation on Administrative Expenses programs.)

Major Reasons for Difference:

	ADP/Telecommunications	Telephone Systems	Total
Deferrals	-$56.3	-$10.5	-$66.8
Cancellations.....	-64.3	--	-64.3
Awards Lower Than Estimated....	-19.3	-4.7	-24.0
Combination of the Above.....	-16.3	-14.2	-30.5
Change in Procurement Strategy 1/	+73.8	--	+73.8
Other 2/	+5.4	+7.0	+12.4
Total Difference.....	-$77.0	-$22.4	-$99.4

1/ "Change in procurement strategy" includes projects such as the Data Communications Utility/Terminal Acquisition Project which falls in this category due to a change in strategy from a lease/purchase arrangement to one of outright purchase during FY 1986.

2/ "Other" category includes miscellaneous reasons as well as those changes not explained because they were under the reporting threshold--10 percent and $500,000.

QUESTIONS SUBMITTED BY THE SUBCOMMITTEE

Senator CHILES. Thank you. There will be some additional questions which we will submit to you for your response for the record.

[The following questions were not asked at the hearing but were submitted to be answered for the record:]

Questions Submitted by the Subcommittee

UNBUDGETED SYSTEMS PROJECTS

Question. The concerns that I expressed in my opening statement about computer modernization are illustrated by two GAO charts.

The first chart shows the huge amount of unspent funds carried over each year for the Social Security Administration's Systems Modernization Plan. The white bar for each year shows the amount budgeted for computer systems modernization. The dark bar shows the amount that was spent.

The next chart looks at the cumulative picture since 1983. The first two bars repeat the data from the first chart: $600 million was budgeted out but only $335 million was spent.

The third bar shows that of the $335 million spent, only $147 million was spent on the actual projects that the Social Security Administration submitted to the Department of Health and Human Services and OMB for approval. More than half of all spending was for projects that the Social Security Administration never requested in its budget submissions. Commissioner Hardy, how can you justify spending such a large amount of money on projects that were not sufficiently important or developed to be included in official budget requests? C-1

Answer. The monies we have spent have been consistent with the overall justifications presented to the Congress. Specific projects, particularly smaller projects, change on a year-to-year basis to best accomplish the goals in our annual budget submission. The numbers which GAO used have not been verified. They appear to be obtained from the back-up material on total obligations (as opposed to new budget authority requested from the Congress) from exhibits 43-B required by OMB Circular A-11. These exhibits list our plans at a point in time for projects over $1 million. Thus, there are two flaws in GAO's analysis: (1) If a project appears for the first time in the operating year of our request to Congress (e.g., the FY 1987 column of the FY 1988 budget request) GAO has described it as unbudgeted; (2) all projects under $1 million are treated as unbudgeted.

Question. Is this an indication that the Systems Modernization Plan was too hastily devised and therefore required frequent revision? C-2

Answer. Not at all. The basic goals and strategies of the SMP have not changed. We have added two additional programs, Systems Operations Management and Administrative/Management Information Engineering, and we have upgraded the plan to reflect the frequent improvements in technology. A major obstacle to effective long-term budgeting has been the length and unpredictability of the procurement process. This has caused major shifts in monies due to delays of contract awards for both services and equipment. We expect that we will continue to make revisions for much the same reasons. That was

the reason we originally requested, and Congress approved, no-year authority for the systems budget.

DIVERSION OF SYSTEMS FUNDS

Question. Official budget documents reveal that the Social Security Administration requested and received money to buy the same computer item 4 years in a row. Documents in my possession show that $3 million was requested by the Social Security Administration for the same computer item in each year between 1983 and 1986. Four times this money was approved by the Department of Health and Human Services and OMB. Four times this money was received by the Social Security Administration for this same project. And four times I guess it must have been spent on something else because it was not spent on this project.

This money came from the larger computer account that Congress approved each year but which Congress cannot and should not micromanage at the level of detailed, individual projects. That is the responsibility of the Social Security Administration, the Department of Health and Human Services and OMB.

Unfortunately, this example does not appear to be an isolated occurrence. It is my understanding that similar budget documents show that this situation occurred for many other projects in the computer account besides this one. What can you tell me about this? With a huge deficit, can we afford to be spending money on the same item 4 years in a row and then have it diverted to something else? Can we afford to tolerate this kind of waste?

Answer: Our plans for individual projects did change on a year-to-year basis. This is part of the process of implementing major systems changes using the carryover funding authority provided to SSA, and is not waste. These changes in plans were incorporated into the operating year of each budget request. Although particular projects like the one mentioned may have appeared in our obligation plan more than one time, the money was only obligated once. If it was not obligated in a particular year, it was carried over. For example, the first year this particular project first appeared in our obligation plan was FY 1983. Since 1983 we have carried over the funds.

MAINTAINING SERVICE AT EFFICIENT COST

Question. While you are trying to save money by slashing personnel, services and supplies, you are spending money four times in a row for the same computer items. In view of this, how can the public trust that you are managing your Agency in a way that is maintaining service to the public at an efficient cost?

Answer. As I stated earlier, funds for the computer item you are referring to--the management information computer facilities replacement project--have not been spent more than once. It would not be appropriate for anyone to conclude that SSA is not serving the public efficiently. The following examples show that SSA has improved its efficiency in serving the public:

- o Processing time for retirement, survivors and health insurance claims decreased from 23.4 days at the end of fiscal year 1984 to 20.7 days at the end of fiscal year 1986.

- o Processing time for SSI aged claims decreased from about 16.3 days at the end of fiscal year 1984 to 10.1 days at the end of fiscal year 1986.

- o Computer response time in offices dealing with the public has been reduced to under 3 seconds, providing the public with quicker responses to inquiries.

- o The system for processing and posting annual wage reports has been improved, so that more than 200 million 1985 wage records were updated to the Master Earnings File by the end of September 1986--6 weeks ahead of schedule and an improvement of almost 2 months over the prior year's processing time.

- o We have reduced the time for issuing Social Security account numbers from an average of 6 weeks, from application to receipt of a card, to about 11 days.

- o Language in beneficiary notices has been improved to make them clearer and more easily understood.

UNSPENT SYSTEMS CARRYOVER FUNDS

Question. It appears from the General Accounting Office's study that unspent carryover funds for Information Technology Systems have consistently been far greater than what you anticipated, for each of the last 5 fiscal years. In view of this history, isn't it unrealistic for your budget to assume there will be no carryover funds at the end of fiscal year 1988?

Answer. We believe that our FY 1988 request for information technology systems is as realistic and accurate as possible, given the difficulties of the procurement process and the resulting uncertainty in budgeting for such a large-scale, long-term modernization. Our FY 1988 request for new budget authority is the lowest we've ever made for ADP, and a larger portion of the total obligation plan is for relatively fixed costs than has been true in the past. In FY 1987, 33 percent of our ITS obligations will be for ongoing costs (lease, supplies, maintenance, telephone usage charges), which are not likely to vary greatly from current estimates, with the remainder to be used for new acquisitions. In FY 1988, the percentage of obligations for these fixed, ongoing costs rises to 45 percent, providing a somewhat greater certainty and stability to the estimates.

Question. Based on past experience, couldn't Congress cut your Information Technology Systems budget request by $100 million, on the assumption that at least that amount will not be spent in fiscal year 1988 anyway?

Answer. As discussed before, a significant portion of our ITS budget is for relatively fixed costs. As for the remainder, barring unforeseen procurement difficulties, I see no reason why SSA should not be successful in executing our plans to spend the remainder. We have based our estimates for FY 1988 on past experience with

procurement time and costs. If past experience is not predictive, and procurement time is longer or equipment is cheaper, we will of course spend less money.

Question. Your budget indicated you plan to absorb $70 million in unanticipated costs for mandatory Federal pay and retirement needs. Is this one of the reasons why you are reducing staff even below the levels recommended by President last year?

Answer. Yes, along with the Congressional reduction of $171 million.

Question. Rather than further cut staff, why didn't you ask for a supplemental, or at least request a larger transfer of excess computer money?

Answer. We are as concerned as the Congress is with controlling the deficit, and believe that we can get our job done with these staffing levels without a deterioration in the quality or level of service.

SURVEY OF SOCIAL SECURITY MANAGERS

Question. In a June 1986 GAO survey of Social Security Administration mid-level managers, 61 percent said their units were understaffed.

Late in 1986, these managers told GAO that although services were still good, future staff cuts would adversely affect service to the public. In view of this, how can you continue to make significant staff cuts at Social Security offices?

Answer. I believe that we can achieve the staff reductions budgeted, while maintaining our service levels. Two major initiatives we have undertaken this year are helping us provide service more efficiently. First, we are intensifying our efforts to do as much of our work as the public wants over the telephone. Second, we are offering appointments for anyone who wishes to schedule one. These two initiatives allow SSA, to some extent, to level the traditional peaks and valleys of our public contact work and to serve the public more effectively while utilizing our staff more efficiently.

Question. GAO's sample survey from 1984 revealed that about half of the disabled visitors to SSA offices had to wait more than half an hour to be served. One-third of all visitors had to wait more than half an hour. GAO's new survey, taken in 1986, shows about the same poor picture.

Although SSA's figures purport to show less trouble with waiting times than GAO's figures, GAO's new report states, "that estimates of waiting times are understated because of certain SSA sampling and receptioning procedures and practices."

The GAO report makes clear that during the time the sample is taken, field offices are taking special measures to reduce waiting times. Obviously this distorts the results to showing small waiting times.

Similarly, the first GAO report found that one-quarter of the

people who telephoned SSA had to call at least three times before they got through. Half of the people had to call at least twice. The new figures show about the same poor record. Are these waiting times for service and for getting through on the telephone acceptable to you as Commissioner?

Answer. Regarding GAO's results concerning telephone service, I am pleased that the percent of callers getting through to us on the first phone call has increased from 47 to 52 percent. I am not satisfied that 22 percent of callers had to phone 3 or more times before they got through to us. This is an area that we are working very hard to improve, and we will. The situation is similar with waiting times for in-person interviews. The trend is clear that waiting times are decreasing, whether GAO's survey or our reports are used.

These indicators of public service will continue to improve because of two major initiatives SSA has undertaken this year. First, we are intensifying our efforts to do as much of our work as the public wants over the telephone. We realize that to make this work we must continue to improve our accessibility to the public on the phone. I am pleased to inform you that during the period of October through December 1986, 25 percent of the new applications received by SSA were filed by telephone calls. This is a considerable improvement over the 17 percent rate in FY 1986. Beyond the obvious convenience to the public this means that approximately 115,000 claimants (the difference between the 17 and 25 percent) did not have to visit our offices. This has a beneficial side effect in that it reduces the number of people in our reception areas waiting for interviews. Teleclaims also allow us to manage our time much more effectively by scheduling these telephone interviews during the time of the day that our interviewers are most likely to be available.

The second initiative concerns my directive in November 1986 that appointments be available for anyone who wished to make one. Again, by scheduling these appointments for times when our reception areas are traditionally less busy, we are able to reduce overall waiting times for everyone. These two initiatives allow SSA, to some extent, to level the traditional peaks and valleys of our public contact work and to serve the public more effectively while utilizing our staff more efficiently.

FURNITURE AND OFFICE RENOVATION

Question. The Social Security Administration plans to spend $30 million in 1988, and several hundred million more over the next several years to renovate and procure furniture for its offices. The General Accounting Office and the Department of Health and Human Services Inspector General both reported problems with these plans. Before requesting these new funds has the Administration evaluated the current condition of each office to determine the actual need for new furniture and renovation, as your own Inspector General recommended? Have you followed his recommendation to explore alternatives to the complete renovation of the offices?

Answer. Currently, our planning calls for the prioritization of furniture and office renovation by use of several screening factors,

including the condition of the office's furniture and the amount of space the office occupies. Office furniture is generally projected to have a useful life of 8 years. Thus, offices with furniture in poor condition or in excess of 8 years old, which occupy space in excess of government-wide guidelines, would be among the first to be renovated. Offices which do not meet these screening criteria would not be renovated. They would be supplied, on an interim basis, with tables to accommodate the new systems equipment they are receiving, with renovations to occur in the future.

THREATS AND ASSAULTS ON SOCIAL SECURITY EMPLOYEES

Question. According to a Social Security Administration regional bulletin, assaults on field office staffs increased 28 percent in 1985, and armed persons detected entering field offices increased 66 percent. Are you concerned about the growing number of threats by claimants against Social Security staff?

Answer. The Social Security Administration began conducting physical security facility reviews on field facilities in late 1982. This was carried over every year with headquarters analysts visiting district and branch offices throughout the various regions. Additionally, added emphasis was placed on providing adequate protection to our field staffs through heightened security awareness alerts and headquarters-sponsored conferences. The reporting form, SSA 3114-U5, was changed from reporting criminal incidents only to reporting incidents of all kinds in January 1985. Field locations were encouraged to report everything to provide a better picture of physical security field posture.

We are always concerned about increases in field office incidents. However, we do not believe the recent increase resulted from claimant activity. The reported increase in threats for 1985 is attributable to the revision of the reporting form, the increased awareness generated and the emphasis placed on security by management. Prior to January 1985, verbal threats were not normally reported since they were not considered criminal in nature. Also, the reporting of armed persons entering the office, in the effort to be thorough and complete, now includes those in rural areas who routinely carry hunting knives with them, and must check them with the guard before entering the office. These persons are not a threat to field office staff.

Question. Do you think it is necessary to strengthen guard services at Social Security offices?

Answer. Social Security has provided money to fund guard services at offices that have shown problems in adequately protecting their staffs. Field management is directed to consider all factors when evaluating the need for a contract guard. Providing protection through electronic means (duress alarms, etc.), office reconfiguration, and close liaison with local and Federal police must be considered first. Only when there is a need for the physical presence of a guard that cannot be met through other means will management consider contracting a guard. This has mainly been in large metropolitan areas, such as New York City, Chicago, Los Angeles, San Francisco, Washington, D.C. and Miami.

The majority of our offices do not require guard service.

IMMIGRATION REFORM--EARNINGS DISCREPANCIES

Question. Your budget justification material (page 95) indicates you expect that Immigration Reform will produce an increased number of earnings discrepancies to be resolved, but apparently no additional staff are recommended to process this workload. Can you give us a high and low range of estimates of what additional staff years might be required to process earnings discrepancy cases related to the Immigration legislation?

Answer. The number of earnings discrepancies detected will depend upon the procedures employed in implementing the legislation. As the regulations develop, we will be in a better position to assess workload and resource requirements due to the legislation.

Question. If you can't tell me a figure now, will you be coming back to us prior to mark-up of the appropriations bill with a request for more funds?

Answer. I don't expect that SSA will need to request additional funds.

ENUMERATION WORK

Question. Your budget includes 2,500 workyears to process additional enumeration work resulting from Tax Reform and Immigration Reform Legislation--the issuing of many new Social Security cards. How did you arrive at this estimate?

Answer. Preliminary estimates showed that about 2,500 workyears may be required to process the additional enumeration work resulting from tax reform and immigration reform legislation.

The 2,500 workyears represent our estimate, at the time SSA's budget was put together, of the resources required to process approximately 18 million new and duplicate Social Security number applications related to the Tax Reform Act and Immigration Reform legislation.

Question. How likely is it that workload due to this new legislation might significantly exceed the budget estimate?

Answer. At this time, I have no basis to assume that SSA's estimate should be changed.

MANDATORY STAFF LEVELS IN BILL LANGUAGE

Question. We understand you intend to reduce staffing for the Social Security Administration to 71,799 full-time equivalent (FTE) positions in fiscal year 1987, even though Congress intended a level of 74,437 FTEs. When the Executive Branch fails to follow the intent of Congress on staffing levels, why shouldn't we include statutory language in appropriations bills?

Answer. We share Congress' concern that trust fund money be spent effectively and prudently, and that SSA continue to deliver high quality service to beneficiaries. We assure you that appropriate action will be taken immediately if service levels

should fall. In FY 1987, within available appropriations, SSA was able to use management flexibility to allocate our resources so as to ensure a continuation of quality service to our beneficiaries.

STAFF CUTS RELATED TO AUTOMATION

Question. For fiscal year 1988 you plan to reduce the Social Security work force by about 2,500 full-time equivalent positions. A large part of this reduction is expected to occur in field offices as a result of the Claims Modernization Project (CMP). To meet this goal, during fiscal year 1988, you will be installing terminals in field offices and training employees across the country. What are your views on the risks associated with converting to a new system and reducing and training staff at the same time? Wouldn't it make more sense to complete the conversion first and then reduce staff? Also, since you are reducing staff through attrition, what are your views on the risks of having attrition occur in locations or staff positions where the Claims Modernization Project is not expected to produce staff savings?

Answer. SSA is proceeding cautiously with employment reductions through attrition, and we do not believe that the budgeted FTE reductions pose a "risk." It does not make sense to us to maintain staff at a higher level than will be needed to process expected workloads. Further, the budget estimates include workyears needed for training SSA staff on the modernized claims system.

As you indicate, reducing staff through attrition can lead to temporary employment imbalances if attrition is heavier in one location than another. We are sensitive to this problem, and we have the flexibility to deal with it through redeployment of staff from other locations, hiring on a temporary or permanent basis, or, if the situation is a short-term problem, increased overtime or the use of details from one office to another. In January 1987 I announced a plan to redeploy staff employees to field workload operation components on a voluntary basis. This program will help ensure that employees are assigned to the locations and functions where they are most needed.

I also wish to point out that claims modernization is not the only initiative through which SSA will achieve staff savings in FY 1988. Some of the other initiatives which will save workyears in FY 1988 are:

--elimination or modification of unproductive systems alerts and diaries in the program service centers and field offices;
--increasing the amount of annual wage reports received on magnetic media;
--change of address processing modifications which will eliminate most of the nonreceipt-of-check workload caused by recent changes of address;
--automation of clear SSI overpayment notices; and
--further streamlining of staff positions.

STAFFING CUTS IN FISCAL YEAR 1987

Question. Congress reduced your fiscal year 1987 appropriation by $171 million, which was roughly the amount of unspent funds from the prior year. At the same time the Congress pointed out that the Social Security Administration should use its contingency reserve of $160 million, if necessary. Soon afterward, you had to absorb an additional cut of $65 million due primarily to the unfunded cost of the Federal pay raise. To meet the reduced spending targets, you have not used the Contingency Reserve but instead have started to reduce staffing by about 5,000 workyears below the level Congress approved for fiscal year 1987. When you made this decision, why did you believe that you would be able to make these cuts without affecting service?

Answer. Our current estimate of 73,314 workyears for FY 1987 is based on estimated workloads, and savings expected from planned management procedural and systems changes. In addition, the FY 1987 estimate reflects specific initiatives to help meet unbudgeted needs within the amount appropriated for FY 1987. Thus, SSA's budget request supports Congressional and Administration initiatives to hold the line on Federal spending and control the Federal deficit. We believed and continue to believe that we can carry out our work with these resources without deterioration in service. For example, nationally SSA is now receiving 25 percent of its claims through teleclaims, as compared to the fiscal year 1986 experience of 17 percent. This means that approximately 400,000 fewer claimants will have to visit our offices in FY 1987 than FY 1986. We estimate that about 1 million people will take advantage of the convenience of teleclaims this year. This is in addition to the added service of being able to make an appointment to handle SSA business.

Question. What specific evidence can you cite now that shows that service has not been affected so far in fiscal year 1987?

Answer. The recent GAO report "Social Security: Staff Reductions and Service Quality," covering the period through December 1986, shows that service levels have not declined so far in fiscal year 1987.

Question. Have you established a "trigger" for the use of the Contingency Reserve?

Answer. No, we do not have a specific trigger for use of the Contingency Reserve.

MAKING SSA INDEPENDENT

Question. What is your position, as the present Commissioner of the Social Security Administration, about making the Agency independent of the Department of Health and Human Services?

Answer. As Secretary Bowen wrote in a March 13, 1987 letter to all Members of Congress we are opposed to separation of SSA from the Department of Health and Human Services. As the present and past Administrations--Republican and Democratic alike--have pointed out, making SSA independent would undercut the advantages of having

interrelated agencies within the same Department and under the same departmental leadership:

- o Establishing SSA as an independent agency governed by a bipartisan board would eliminate the Agency's cabinet-level representation;
- o Implementing the proposal would break up an integrated system of service delivery for income maintenance, family services and health programs;
- o Making SSA independent would weaken the Agency's access to the support services of the General Services Administration and the Office of Personnel Management in meeting resource and personnel needs; and
- o Removing SSA from HHS would eliminate many of the general administrative economies inherent in a large Government department and require expenditure of Social Security trust fund monies for the establishment of duplicative and expensive payroll, personnel and other support structures now operating efficiently at HHS.

Moreover, contrary to what its supporters allege, independent agency status cannot insulate SSA from political pressures:

- o Whether or not Social Security is administered as an independent agency will not change the basic fact that the same groups and elected officials will continue to play key roles in the development of Social Security policies.

- o Even if it were possible, it would not be at all desirable to insulate an agency which makes decisions affecting millions of people and manages billions of trust fund dollars from external influences and criticism.

- o Moreover, even if SSA were made organizationally independent, its size, complexity, interrelationships with other agencies and sheer importance to so many people would never allow it to operate independently.

ACCURACY OF SOCIAL SECURITY COLA'S

Question. Many recipients have complained that the Social Security cost-of-living adjustment they received this past January of 1.3 percent did not reflect the much higher cost-of-living they endured. Do you believe the Consumer Price Index (CPI) tabulated by the Bureau of Labor Statistics is accurately reflecting the cost-of-living for the elderly?

Answer. Yes, we believe the CPI currently tabulated by the Bureau of Labor Statistics accurately reflects the cost-of-living for the elderly. This view is supported by numerous studies which have found that the overall CPI adequately reflects the price increases faced by the elderly. Notable among these studies is one done by the General Accounting Office in 1982 which concluded that a special CPI for the elderly was not needed to fairly index benefits.

Question. Would it be desirable to have a separate Consumer Price Index for the elderly?

Answer. The problem with adjusting Social Security benefits based on a separate Consumer Price Index for the elderly is that Social Security beneficiaries are not a homogeneous group of elderly people. Benefits are paid to children under 18, to young surviving parents and to disabled people under age 65. At the end of 1986, over 10 million Social Security beneficiaries were under age 65. This is more than a quarter of the total number of beneficiaries, about 38 million. So it would be inappropriate to adjust all Social Security benefits based on changes in an index that reflects only consumption patterns of the elderly.

SURPLUSES IN SOCIAL SECURITY TRUST FUNDS

Question. Is it true that the Social Security system is expected to generate enormous surplus funds in the near future?

Answer. It is true that, under the intermediate (Alternative II-B) economic and demographic assumptions of the 1986 Trustees Report, the assets of the Old-Age and Survivors Insurance and Disability Insurance Trust Funds are estimated to grow substantially over the next 3 decades. At present, however, the assets of the trust funds are equivalent to only about 3 1/2 months' benefits. The reserves of the trust funds are expected to be no greater than about 5 months' benefits by the end of 1987 and are not expected to reach the equivalent of a year's benefits until the early 1990's.

Question. Does this mean that the Social Security tax will be higher than necessary? What becomes of these surplus funds?

Answer. Although the OASI and DI Trust Funds are expected to accumulate substantial reserves in the near term and to reach a peak of about five times annual outgo in the period 2010-2020, the trust funds are in close actuarial balance over the 75-year long-range projection period under Alternative II-B assumptions. Under the assumptions, the trust funds are estimated to accumulate substantial reserves during the remainder of this century and early part of the 21st century, which will be drawn down thereafter as the "baby boom" generation enters retirement age after about 2015.

In considering the accumulation of trust fund reserves in the near term, it is important to bear in mind that the tax and benefit provisions of present law reflect the Social Security reforms that were adopted in 1983 as part of a bipartisan effort to restore the financial soundness of the Social Security system not only in the near term, but over the long range as well. Moreover, the decline of the trust funds under the economic experience of the 1970's suggests that policymakers should adopt a conservative approach in considering any short-range changes in Social Security financing, both because of our responsibility to Social Security beneficiaries and because no one can predict future economic behavior.

SYSTEMS MODERNIZATION PLAN

Question. In 1982, the Social Security Administration (SSA) began a massive 5 year modernization of its systems at an estimated cost of $500 million. What are its estimated costs now and when are you projecting it will be completed?

Answer. The original Systems Modernization Plan (SMP) included four programs at an estimated cost of $479 million and was scheduled to be completed in 5 years. We periodically reestimate the cost of the SMP and are now projecting that the original four program objectives will be largely completed during FY 1989 at a cost between $501 million and $536 million. That is a cost variance of 5 percent to 12 percent--well within the industry average variance of 18 percent for major software projects.

In March 1983, the Systems Operations Management (SOMP) and in January 1985, the Administrative/Management Information Engineering (AMIE) programs were added to the original SMP. Our current estimate for these two programs through FY 1989 is $165 million, which brings the total estimate for all six SMP programs through FY 1989 to between $666 million and $701 million.

It is important to note that the SMP contains costs besides those in the Information Technology Systems (ITS) budget, including estimates of personnel time, travel, training, etc. These costs are not identified as a specific part of SSA's budget but are included in overall SMP plans. Total SMP costs are generally provided as part of the annual SMP update and have not been separately developed or identified as part of SSA's budget justification.

Question. Please tell the Committee how you have responded to recent GAO criticisms of the Agency's management of the project?

Answer. GAO has released a number of reports related to the Systems Modernization Plan during the past year. Examples of the criticisms are that the SMP has fallen behind schedule and improving software for postentitlement actions is postponed indefinitely; that procurements were not adequately justified or documented; and that SSA continues to develop software without the benefit of agency approved standards for software documentation, testing and validation.

In general, I have found the findings and insights from these reports to be helpful and constructive. In our responses we have cited our steps to make recommended changes, especially in the software development area.

OFFICE CLOSINGS

Question. Will your systems modernization lead to office closings this year?

Answer. Systems modernization by itself would never justify a decision to open or close any SSA field office. Such decisions are made based on an overall assessment of many factors, of which systems modernization is just one.

Other factors include:

--The population of the area being served. (Both size and other demographic variables)

--The transportation/commuting/travel patterns of the community.

--The modes of service that the area population usually chooses. (Telephone, mail, in-person)

--The most effective and efficient office configuration possible to deliver service to the community.

Question. Please provide the Committee with a listing of offices closed in fiscal year 1986 and their approximate size, and a similar listing for fiscal year 1987 and to date.

Answer: The following table provides information on office closings/consolidations in FY 1986 and FY 1987.

Office	Staff Size	Action
Glenview, IL	11	Consolidated into one office in Des Plaines, IL (FY 1986)
Arlington Heights, IL	14	
Des Plaines, IL	19	
LaGrange, IL	7	Consolidated with the North Riverside, IL office (FY 1986)
Northeast Atlanta, GA	12	Consolidated with the downtown Atlanta office (scheduled for 3/30/87)
Southwest Atlanta, GA	16	Consolidated with the East Point, GA office (scheduled for 3/30/87)
Daniel Village (Augusta), GA	16	Consolidated with the Augusta, GA office (scheduled for 3/30/87)
Bad Axe, MI	2 (3 days per week)	Service reduced to 1 day per week (scheduled for 5/1/87)
Louisville (West), KY	11	Consolidated with the Louisville (Downtown), KY office (scheduled for 12/87)

PERFORMANCE STANDARDS

Question. Another problem cited by the General Accounting Office is the lack of national performance standards, or benchmarks, for the services the Social Security Administration delivers. Without these benchmarks in such areas as accuracy, timeliness, efficiency, or client satisfaction, it is difficult to tell how well the Social Security Administration is (1) performing, (2) quickly identifying problems, and (3) fully determining the appropriateness of resource levels. Have you initiated efforts to develop national performance standards for key services? If so,

for what services are standards being developed and when do you expect them to be completed? Do you plan to solicit views of interested groups before you implement such standards? If you are not developing these standards, why not?

Answer. I have established a set of operational objectives for SSA in the "Commissioner's Activities Report and Operations Tracking System." This system includes goals for many of the Agency's activities including improved accuracy and timeliness, more accurate earnings record files and increased satisfaction among users of SSA services.

Each activity has a designated executive responsible for its achievement, and targets are included in performance plans of subordinate managers. In this way we can work towards a national target or goal, and at the same time take into account particular regional or local variations that must be accounted for in setting standards.

SSA uses a number of objective performance indicators to monitor performance of key services, such as processing times, accuracy, waiting times in field offices, workloads pending, and age of pending cases. Other more subjective indicators include what the public tells us about our service--letters, Congressional inquiries and personal comments to individual office managers. Also, to broaden the scope of our analysis of public opinion and as recommended by GAO, SSA is now in the process of contracting out its first survey to gauge the public's opinion of the service the Agency provides.

Local offices are monitored closely to ensure that performance does not deteriorate in relation to local goals. However, many things can temporarily affect processing times or quality, and, taken alone, may not indicate overall deterioration or improvement in service. An example would be the recent increase in disability case processing times during implementation of new regulations related to the Disability Benefits Reform Act of 1984, which changed the rules on mental impairment cases and on continuing disability as related to medical improvement.

While we do not have national performance standards per se, the following table provides indicators of SSA's performance.

Indicators of SSA Performance

Processing Times

Mean Time in Days	Quarter Ending 12/84	12/85	12/86
Claims			
Old age and survivors insurance (OASI).....	22.9	20.7	19.9
Disability insurance (DI)..	71.3	71.2	79.0
SSI aged.....	14.5	10.9	10.9
SSI blind and disabled.....	70.7	64.7	80.1
Hearings.....	168.0	154.0	178.3

Payment Accuracy

	Fiscal Year		
	1984	1985	1986
OASI program	99.5%	99.5%	99.65%
SSI program	96.7%	96.7%	96.1%*

* SSI payment accuracy shows a slight decrease in FY 1986 from FY 1985, primarily due to the interface of SSI records with IRS records which has increased SSA's capacity to detect errors in the SSI program.

Workloads Pending
(at end of period)

	FY 1984	FY 1985	FY 1986	February FY 1987
Field Offices				
OASI and health insurance (HI) claims	151,400	155,400	115,500	126,300
DI claims	260,000	233,400	276,500	229,800
SSI aged claims	12,500	6,100	4,900	4,000
SSI blind and disabled claims	169,000	217,500	246,900	211,300
OASDI and SSI overpayments	122,400	86,000	105,800	105,900
Program Service Centers				
OASI claims	91,800	85,600	59,200	65,000
Overpayments	54,600	30,600	16,400	16,400
Office of Disability Operations				
DI claims	48,500	35,600	19,200	17,200
Office of Central Records Operations				
Certified wage records for OASHI and DI claims	85,800	58,400	67,700	45,700
Office of Hearings and Appeals				
Hearings	107,800	107,600	116,800	139,000

Waiting Times in SSA District and Branch Offices

	Quarter Ending			
	3/86	6/86	9/86	12/86
Average in minutes...	12.3	10.3	8.9	7.2
Percent of visitors who waited 15 minutes or less..	75.0%	79.0%	81.8%	82.0%
Percent of visitors who waited over 30 minutes.....	12.7%	10.0%	7.6%	6.7%

FINANCIAL MANAGEMENT

Question. The General Accounting Office has expressed considerable concern about the Social Security Administration's lack of sufficient emphasis on financial management over the last several years, due largely to the lack of enough management attention in this area. As a result, the Agency has been slow to act to prevent overpayments, slow to systematically use cost data to manage operations, and slow to effectively manage cash and debt collection efforts. To remedy these problems, GAO recommended that you establish a controller or comparable official, work with the Social Security Board of Trustees to develop auditable financial statements for Social Security programs, and arrange for an independent audit of these statements. What is your assessment of GAO's findings in this area? What actions have you taken and do you plan to take to address GAO's recommendations?

Answer. We agree with GAO that improvements are needed in SSA's financial management system, which pays benefits of over $200 billion a year to more than 40 million people. To move toward improvements, I have established the position of Chief Financial Officer, who will report directly to me. The Chief Financial Officer is responsible for planning, organizing, directing and coordinating:

--SSA administrative accounting activities;
--certification and accounting activities for benefit payments; and
--development and implementation of an integrated financial accounting system.

VARIATIONS IN EFFICIENCY AMONG SSA COMPONENTS

Question. Despite numerous promises by various SSA officials since 1979 to devote more attention to the operating efficiency of its components, SSA had not made significant progress in this area. GAO reported the continued existence of wide variations in efficiency among and within similar organizational units throughout SSA. To what would you attribute SSA's slow progress and what steps are you taking to increase SSA's emphasis on operational efficiency and reducing unjustified variations in efficiency among SSA units doing similar work?

Answer. SSA has made significant productivity improvements annually. Despite this there are still variations in efficiency among SSA units that perform similar work.

Although many of these units appear to be performing similar type of work there can be significant differences within a given workload. For example, a retirement claim can be a very simple affair to process for the claimant who has a copy of his or her birth certificate, has worked for wages and has W-2 forms readily available, if needed. On the other hand, a retirement claim for a foreign-born claimant without easy access to birth records, who isn't completely comfortable speaking in English, who may be apprehensive about dealing with a government institution, and who was self-employed or had many different types of employment is a very different situation.

In dealing with a variation in productivity in similar units we must go beyond the total volume of work to look at the mix of work involved in order to be sure there won't be a negative impact on service because of efforts to bring about balance. This does not mean that we have not been active in this area. We have established a productivity initiative in FY 1987 aimed at closing this gap in productivity levels as much as possible. This initiative is reflected in the performance plans of SSA's senior executives. Each regional commissioner has selected one person to be the productivity coordinator for that region. Regions routinely share their "best practices" and operating policies with each other. We will continue to work on this area during this and the next fiscal years. In the future we expect to see significant improvements resulting in less variation in regional productivity.

WAITING TIMES UNDERSTATED

Question. GAO's report stated that the wait time data you have been compiling and reporting to the Committee understates the amount of time most persons actually wait before they are served. What do you plan to change in the way you collect and report this data, to ensure we get an accurate picture of how long people wait?

Answer. We recognize that the field office wait time data collected by SSA do not include the time individuals may wait to see a receptionist. To learn how long individuals spend waiting to see a receptionist, we conducted a special study in August 1986. The study showed that 41 percent of the visitors had not waited before seeing a receptionist. The 59 percent who did have to wait, waited an average of 8.8 minutes to see a receptionist. Because of the additional cost that would be required to measure this wait time, we prefer to monitor it on an ad hoc basis. We believe our methodology for measuring wait times is adequate to gauge this aspect of SSA's service, and we have emphasized to field offices that reported wait time data must be representative of normal practices.

We note that GAO's survey of the public in November 1986 indicates a 4 percent improvement in the number of visitors being served in 15 minutes or less since the prior GAO survey in 1984. An improvement in wait time also is reflected in SSA's data which show an average wait time of 7.2 minutes in December 1986, and

improvement from the March 1986 level of 12.3 minutes. We are encouraging increased use of the telephone and appointments, which can further reduce field office waiting times.

MANAGEMENT PROBLEMS

Question. GAO reported that the Social Security Administration has made slow progress in modernizing its computer system and called this the Agency's most urgent and critical problem. As a result, much of the programmatic and administrative workload must be processed more expensively by manual effort rather than by computer. Also, the quality of service to the public, such as the clarity and accuracy of notices it sends to the public, has not been as good as it could or should be. GAO recommended several actions to improve SSA's managerial and technical control over its modernization effort. Do you agree with GAO's assessment of the Social Security Administration's progress and problems?

Answer. Yes, the General Accounting Office (GAO) draft report, "Social Security Administration: Stable Leadership and Better Management Needed to Improve Effectiveness," accurately describes the difficulties we have encountered in our systems modernization effort.

Question. What actions have been taken and do you plan to take to address the problem GAO identified?

Answer. As the GAO report also states, visible improvement in the management of the systems area has already occurred. Our Systems Modernization Plan is a major undertaking that will fundamentally change our systems and operating environments. To increase management's control over the modernization, we have developed and put into place uniform software engineering standards for systems personnel to use as they develop and maintain the modernized systems. At the same time, procedures have been initiated that closely control changes to our hardware and software systems and ensure that our prescribed software engineering practices and standards are used and enforced. The systems integration function has been strengthened to reflect an increased level of effort and emphasis. Collectively, these actions promote more effective management and control of the Systems Modernization Plan's development and implementation. In addition, we have established an Office of Strategic Planning, which reports directly to me. Its major task will be the development of a 10-15 year strategic plan to guide SSA's development into the next century. The long range planning effort will integrate systems modernization projects with overall Agency plans.

Question. What additional actions do you believe the Congress or others need to take to assist in this area?

Answer. We are grateful for the high level of support SSA has received from the Congress in our efforts to modernize our archaic systems and operational processes. We hope to continue to work together with the Congress to ensure that SSA is in the best position possible to perform its mission and to continue to deliver a high standard of service to the public.

Question. When do you believe computer system modernization will have progressed to the point where substantial cost savings will be realized?

Answer. The budget before you reflects a savings of 2,134 workyears in FY 1988 from the claims modernization process. These significant reductions are to be realized from the phasing-in of an automated title II claims taking process.

Five years ago when the modernization of the computer system was being formulated, SSA had to race against the clock to get benefit checks released each month. Long lead times were needed to prepare for changes such as the annual cost-of-living adjustment and, a high systems fall-out rate meant that many cases required expensive manual processing. In addition to saving workyears, our improved computer systems have rescued us from an outmoded system on the brink of collapse and also enable us to administer our programs more efficiently.

BACKLOGGED WAGE REPORTS

Question. GAO work still in progress indicates that there is a considerable backlog of employer wage reports that have not been reconciled with IRS records and which affect the accuracy of individuals' earnings records. How big are these backlogs? How long will it take to contact employers to resolve the accuracy of workers' records? Would providing additional staff accelerate your efforts to eliminate the backlogs?

Answer. In the cooperative agreement between IRS and SSA, IRS was to handle the reconciliation of discrepant or missing employer report. However, largely because of budgetary constraints, IRS has not been able to reconcile cases which do not involve a tax liability. Consequently, the missing and discrepant wage data identified by IRS have not been resolved since annual wage reporting began in 1978. Approximately 2.4 million employer reports were not posted to SSA's records for 1977-1983, and 1.3 million employer reports that were posted showed less wages than were reported to IRS.

The original backlog of 3.7 million reports has been reduced to 2.5 million (as of October 1, 1986) through various systems matches (which identified reports already completed through the regular annual wage reporting process), application of tolerances (which eliminated items with small money variances), and the start up of SSA's efforts to reduce the backlog of initiating correspondence to employers with reporting problems (primarily for tax year 1983). The employer reports and other information received from these employers are used to reconcile the wage reporting problems and correct the earnings records for employees affected by the misreporting. SSA is continuing to correspond with employers with multiple reporting problems for tax year 1983 and prior years.

While we are continuing to make progress in resolving the backlog of discrepant and missing employer reports, initially we are stressing only those reports that affect tax year 1983. At the same time, we are in the process of reassessing our current approach to the reconciliation backlog problem in an attempt to

determine the most efficient and cost effective approach to future reconciliation processing. Once we have completed this reassessment, we will be in a better position to determine how long it will take to complete the reconciliation effort as well as the appropriate level of staff that we must devote to the effort. The fiscal year 1988 budget includes 355 workyears each for fiscal years 1989 to reconcile discrepant and missing employer reports of employee earnings.

SLOW PROGRESS IN COMPUTERIZATION

Question. GAO attributed a large part of the Social Security Administration's slow progress in its computer system modernization effort to changing approaches as Commissioners changed. What do you think can be done to minimize continuous changes to the Social Security Administration's modernization strategy?

Answer. The SMP was begun in 1982 in response to a severe crisis in SSA Systems' capacity to process our workloads. It was intended to avoid service disruption through immediate improvement of critical system deficiencies, to improve productivity and to close the technology gap that had developed over the previous decade. The SMP was successful in resolving critical system deficiencies: the feared service disruptions never materialized. It has also begun to improve productivity and to close the technology gap.

What the SMP did not have was a sense of strategic direction. It was intended to bring modern computer technology to bear on the way we do business today. It did not answer the question of how SSA should use technology to shape the way it will operate to meet changing needs over time.

The answer to that question, however, is not found in technology alone, but in an enduring vision of how SSA intends to meet tomorrow's needs, a vision that encompasses all aspects of Social Security life as a service delivery organization, not just Systems. What is needed is a Service Modernization Plan, not merely a Systems Modernization Plan. We understand that now, in large measure due to our experience with the SMP.

Through the establishment of an Office of Strategic Planning that reports to me directly, SSA has begun the development of a Strategic Plan to provide such a vision to guide our development into the 21st century. Particular efforts are being taken to insure that the planned development of systems--what we have called SMP--will support and be integrated into the overall development of the Social Security Administration. That, more than anything else, will insure steady progress in modernizing our system.

PROBLEMS WITH BUDGET PREPARATION PROCESS

Question. GAO reported very disturbing problems with the Social Security Administration's budget preparation process. These included use of time it does take to process work rather than the time it should take to determine needs for operating staff and an unstructured and undisciplined process for determining resources needed for other areas, such as computer system support and

modernization. What steps have you taken and do you plan to address these problems?

Answer. Regarding our budget estimates for operating staff, it is true that SSA does not rely on uniform engineered standards. However, SSA does not accept "does take" as "should take." We start with base year "does take" performance and build in unit time improvements related to planned management, procedural and systems changes. If our analysis of actual base year experience reveals an imbalance between work on hand and the number of employees in place to process this work, SSA also budgets to correct this imbalance with future improvements in unit times.

While we do not develop our budget based on formal engineered standards, we do share the GAO-expressed concern about wide differences in production rates among and within SSA regions. SSA's budget estimates reflect our commitment to bring regional unit times into line, focusing in particular on title II workloads. To meet this commitment we are taking actions such as sharing local managers' best operating practices with other managers, as GAO has suggested.

Regarding our budget estimates for computer system support and modernization, I assume you are referring to SSA's Information Technology Systems (ITS) account and to the GAO fact sheet released on March 11, 1987 on ITS budget requests and obligations. The GAO report indicates that SSA has carried over significant amounts of ITS funds and that SSA has used ITS funds for unbudgeted projects. We have carried over a significant amount of money and our fiscal year 1988 ITS budget request has been reduced to take this into account. We have not used this carryover for unbudgeted projects. We have continuously updated our carryover estimates for more recent experience and believed that we were providing adequate reports which explained any significant changes in our ITS plans.

PUBLIC'S VIEW ABOUT SERVICES

Question. In January 1986, GAO recommended that you periodically obtain the public's view about the service you provide and you said you would do so. Now, over a year later, you have not yet done so. Why has it taken so long for you to carry out this recommendation?

Answer. After considering options as to how SSA should conduct these surveys, in-house or contracted out, we decided in August 1986, that we would use an independent private contractor for the first survey. This will ensure objectivity and provide us with a basis for determining how we should conduct future surveys. The project required approval by the Department of Health and Human Services due to the estimated cost and nature of the proposed contract. The Department approved the project in January 1987. The Request for Proposal is expected to be published in April 1987. Past experience shows that award time for this type of contract is approximately 9 months. We are attempting to expedite the process so that the award will be made in September 1987.

Question. When will you begin to obtain such data on a regular basis?

Answer. Once the contract is awarded, the contractor will require time to develop the sampling methodology, develop the questionnaire, gather and analyze the data and prepare the final report. The data collection phase itself is expected to begin in May 1988. The frequency of the ongoing surveys will be determined after the results of the first survey are received and analyzed.

Question. When will the results of your first such study be available?

Answer. The final report will be due from the contractor in August 1988.

STATE DISABILITY SERVICES

Question. GAO also reported large increases in costs of State Disability Determination Services as well as a substantial decline in productivity within these organizations over the last few years. Substantial variations in productivity also existed among the States. Why have these costs increased so much and why has productivity declined overall and varied so much among States?

Answer. SSA was required by the 1984 disability amendments to promulgate new regulations for the processing of mental impairment cases and continuing disability reviews taking into consideration medical improvement. A moratorium on the processing of CDR's was imposed by the Secretary while these regulations were being developed and approved.

During this period, the DDS staff was retained because SSA expected a reasonably quick restart of the CDR process upon enactment of final approved regulations. However, the regulations were not approved until late December 1986 and restart occurred in January 1987. Action to reduce DDS staffing could have been initiated earlier if we had known that the final regulations would not be approved until December 1986. We are now actively adjusting staff to appropriate levels and will continue until productivity, staffing and workloads are balanced.

The cost increases experienced by the DDS' over the past few years occurred in two major areas--personnel compensation and medical documentation. During the last 4 fiscal years (FY 1983 to FY 1987), the average salaries for State DDS staff (including medical consultants) have increased between 6.5 percent and 8.5 percent. SSA is not in a position to control the degree of salary increases granted by State legislatures. However, we have implemented controls on

overtime use and initiatives to improve productivity to offset some of the average salary increases.

In the medical cost area, the DDS' have experienced increases between 6.0 percent and 11.9 percent for each year during the 1982 to 1985 period. Current plans involve a series of work simplification initiatives, to ensure that unnecessary medical evidence is not purchased and thus offset some of the medical rate increases.

Question. What management controls did the Social Security Administration have over State Disability Determination Service costs and productivity and what steps have you taken to improve them?

Answer. The regulations require SSA to meet all appropriate expenses incurred by the DDS' in carrying out the disability program to the extent that funds are available.

As indicated earlier, the personnel and medical costs are the major areas of DDS costs. We are controlling these areas through the following initiatives:

- o implementation of staffing and workyear controls to match the size of each DDS' workforce to its expected workloads;
- o establishment of medical cost line-item controls;
- o establishment of consultative examination oversight initiatives;
- o institution of work simplification initiatives to streamline the claims adjudication process and improve productivity; and
- o development of a number of alternatives for more equitably measuring DDS performance so that the States performing on the lower end of the spectrum can have their performance problems better evaluated and appropriate corrective action instituted.

LONG-RANGE PLANNING

Question. Despite many calls for a long-range operational plan over the last decade, it appears the Social Security Administration still does not have one. GAO reported several problems facing the Agency as a result of not having such a plan. These include the lack of an operational plan upon which to guide computer modernization, difficulties implementing staff reductions, and insufficient integration of component activities, such as proposed acquisitions of computer

equipment for various purposes by different components. GAO has also reported that you have launched a major effort to develop such a plan. What progress have you made and when do you expect to be finished? What do you expect this plan to cover? What plans do you have to confer with the Congress, future beneficiaries, and other groups interested in considering the Social Security Administration's future direction? What help can the Congress provide in this effort?

Answer. The Social Security Administration has established an Office of Strategic Planning and is now going through a structured process to arrive at an Agency Strategic Plan. That plan should be drafted by late summer 1987, and will include:

1. A comprehensive target scenario describing how the Agency should operate in the year 2000 in order to meet the expected needs of the American public at that time.

2. Changes in programs, operating policy, technology, operations and budget necessary to achieve the target scenario.

3. A detailed project management plan for getting from the present to the target scenario for the year 2000.

Initial phases of the planning process--such as goal definition, analysis of business functions and gathering of images of alternative functions--have been completed. Drafting of preliminary alternative scenarios for analysis, as well as development of effectiveness and cost models to evaluate the alternative scenarios, is expected to be completed by the end of April.

A critical step is the sharing of this information with Congress, future beneficiaries, monitoring authorities and other interested groups before a final plan is devised. We are taking the following steps to insure this:

- A formal briefing for higher monitoring authorities such as GAO, GSA and OMB is scheduled for May 28, 1987 to advise them of progress made to date on developing the Strategic Plan.

- The first is a series of similar briefings for groups representing both present and future beneficiaries will be held on May 23, 1987. These briefings will be held at regular intervals until the Plan is published.

- Meetings at the staff level have begun between the SSA Office of Strategic Planning and GAO to insure early identification of issues.

The Commissioner of Social Security would also welcome the opportunity to provide detailed briefings on our planning progress and procedures to members of Congress and their staff, in addition to advising Congress through normally scheduled testimony and other ongoing contacts.

SUPPLEMENTAL SECURITY INCOME (SSI)
OUTREACH TO THE HOMELESS

Question. It is estimated that 30 to 40 percent of residents of emergency shelters for the homeless are the chronically, mentally ill. Have legislative and administrative initiatives aimed at providing assistance to homeless persons that qualify for SSI benefits been successful?

Answer. Yes, we believe they have. As you know, SSA launched a nationwide initiative in 1984 to improve our outreach efforts to the homeless. Discussions with various interest groups indicate that these efforts have been very successful.

Question. Exactly what is the Social Security Administration doing with respect to the homeless population?

Answer. The determination of eligibility for Supplemental Security Income (SSI) payments allows SSA to exclude from the definition of income such "in-kind" assistance as food, clothing and shelter received by the homeless from charitable organizations.

SSA has already implemented two of the three provisions contained in the recent Anti-Drug Abuse Act related to the homeless. Since 1978, SSA has had a prerelease program in place which allows claimants to apply for SSI before release from a public institution so that payments can be made promptly upon release. In addition, in 1984 SSA launched a nationwide initiative to increase outreach activities to the homeless including working with claimants who do not have a fixed residence, to establish a way for them to receive regular SSI payments and information.

The third provision of this legislation requires the Secretaries of Health and Human Services and of Agriculture to develop a single application for SSI and Food Stamps which would be used by claimants in institutional prerelease programs. Work with the Department of Agriculture to develop this combined application is ongoing. In the meantime, Food Stamp and SSI applications are being taken simultaneously so that individuals awaiting release from public institutions will not be required to take additional actions to apply for Food Stamps.

Other examples of SSA's commitment to serve the homeless are embodied in an operational plan which is being carried out through our 10 regional offices and over 1,300 field offices. As part of our outreach initiative SSA workers go to such facilities as shelters and soup kitchens not only to take applications from the homeless but to secure the help of people who run these facilities to identify eligible individuals and assist them in securing any evidence necessary to establish and maintain their entitlement.

Field offices are empowered to provide immediate monetary assistance in the form of emergency advance payments when individuals appear to be eligible even if a final determination had not yet been made. Immediate payments of as much as $200 may also be made prior to receipt of the first regular payment if entitlement has been established and the individual's well being is in imminent danger.

There are additional examples of SSA's commitment to reach out to the homeless. SSA works closely with many national organizations such as the National Mental Health Association, the International Association of Psycho-Social Rehabilitation Services and the National Alliance for the Mentally Ill in an effort to assist their efforts in meeting the needs of the homeless. SSA is working with the Department of Labor in its jobs for Homeless Veterans program and is cooperating with the Robert Wood Johnson Foundation in two of its projects for the chronically, mentally ill people.

Many SSA employees volunteer in various capacities to alleviate the plight of the homeless, such as a district manager in Boston who serves as president of a homeless shelter; a field representative in another Boston office who serves as a treasurer of a shelter; the district manager in Baltimore serving on a group overseeing a project to assist homeless veterans; a field representative in Chicago who serves as SSA's representative on the Chicago Coalition for the Homeless; or the claims representative in Los Angeles who works with the Public Guardians Office in Los Angeles, and many, many others.

Question. Are some Social Security Administration staff actually stationed at emergency shelters?

Answer. SSA does not have staff stationed at homeless shelters on a full-time basis. Under SSA's operational plan for serving the homeless, there is a nationwide effort to maintain close contact with the individuals who manage the shelters for the homeless. They are asked to alert us to potential applicants and help keep track of recipients. SSA employees make periodic visits to shelters and soup kitchens to take applications and follow-up on claims as necessary.

THE SOCIAL SECURITY "NOTCH" PROBLEM

Question. Many recipients have complained that because they were born between 1917 and 1921 they were disadvantaged by Social Security changes enacted in 1977. What is the Administration's position on resolving the inequity, and what would it cost to fix the situation?

Answer. You are referring to the so-called "notch," a situation in which benefits payable to people born after 1916 may be lower than those payable to people with similar earnings histories born in 1916 and earlier.

While the Administration has not taken a formal position on the various bills that have been introduced to address the "notch" issue, we do not believe that an inequity has occurred with regard to those people born between 1917 and 1921. Instead, those people born from 1910-1916 are receiving windfall benefits because the old computation method established by the 1972 Social Security amendments overcompensated for inflation.

The 1977 Social Security amendments ended the overcompensation for inflation for all people born after 1916 and restored more appropriate benefit levels. The widespread perception that people born between 1917 and 1921 receive lower benefits than people born both before and after that period is not true. Their replacement rates compare favorably with rates for those born in 1922 and later and those born before about 1910.

We have deep concern about the "notch" bills that have been introduced in the Congress so far. These bills would raise benefits for people born after 1916 although the real problem is that those born between 1910-1916 receive too much. Moreover, such bills would be very expensive. The total cost would range from the tens of billions of dollars to the hundreds of billions of dollars depending on the approach selected.

Question. How much will next year's (January 88) cost-of-living adjustment be, and how much will it cost in fiscal year 1988?

Answer. The budget assumes that a 3.5 percent cost-of-living adjustment will be paid in January 1988. The projected 3.5 percent increase assumed in the budget for persons receiving OASDI benefits would cost the trust funds $5.4 billion in FY 1988.

Question. Have the Social Security trust funds been restored to the position they would have been in had the debt ceiling crises of the past few years not emerged?

Answer. Yes, after the debt limit crisis of 1984 through 1986 when Congress increased the debt limit in

these years, all uninvested assets of the trust funds were immediately invested and provision was made for restoring, with respect to both interest rates and maturity dates, the holdings that were disinvested. Also, legislation was enacted to restore all of the holdings of the trust funds to what they would have been had there been no debt-limit crisis, and interest lost due to the disinvestment was paid to the trust funds.

Question. Do you, as Secretary to the Board of Trustees, believe additional legislation is needed to protect the trust funds?

Answer. While I do support legislation to place restrictions on the disinvestment of the trust fund assets, the fact remains that prevention of a debt-limit crisis of the kind which occurred in the fall of 1986 is the surest way to avoid any negative effects on trust fund assets.

Question. Why should black lung benefits be frozen in FY 1988 when Social Security benefits and Federal salaries are not proposed for a freeze?

Answer. Our proposed appropriation language change, which would maintain black lung benefits at the current level throughout 1988, is intended to alter the Part B program consistent with changes proposed in the Part C program by the Department of Labor. The impact on our beneficiaries is minimized as approximately 75 percent of Part B beneficiaries are concurrently entitled to Social Security benefits and will benefit from any increases in that program.

Questions Submitted by Senator Lowell P. Weicker, Jr.

Question. Commissioner, I understand the Social Security Administration provides interpreters for deaf clients. Is that correct?

Answer. Yes, that is correct.

Question. How much was provided in FY 1986 Social Security budget for deaf interpreters? How much in FY 1987? How much are you requesting in FY 1988?

Answer. In FY 1986 SSA spent $164,800 for deaf interpreters, in FY 1987 we expect to spend $289,000 and in FY 1988 $350,000.

Question. Commissioner, in your budget justification, you state that "most" of the mental impairment cases subject to re-review under new rules for evaluating individuals with mental impairments were completed in 1986. How many are still awaiting re-review? Out of a total of how many?

Answer. At the end of FY 1986, there were 43,000 mental impairment cases awaiting re-review, out of a total of 186,000. As of February 28, 1987, 7,300 remained.

Question. Will all of the re-reviews be completed in 1987?

Answer. Yes, the mental impairment re-reviews will be completed in 1987.

Question. What percentage of these re-review cases have resulted in reinstatement of Social Security benefits?

Answer. The mental impairment cases that are being re-reviewed were claims that had been denied initially. Of these initial denials, approximately 33 percent were allowed upon re-review.

Question. Commissioner, when the Secretary of Labor testified before this Subcommittee 2 weeks ago, he indicated that one of the reasons it may be difficult to assist disabled persons to gain employment was that the Social Security disability insurance program contained disincentives for disabled persons to work. What disincentives to work are there in the SSDI program? I understand loss of health care benefits is, in fact, one of the disincentives for disabled persons to return to work. Is this the case? If so, what steps can be taken to address this problem?.

Answer. Although the possibility of the loss of health care benefits may be of concern to disabled persons who are contemplating a return to work, the present Social Security disability insurance program does include a number of incentives designed to encourage all disabled individuals to work. These incentives include:

- a trial work period during which a disabled beneficiary may test his or her capacity to work for 9 months without affecting entitlement either to disability benefits or to Medicare coverage;

- an extended period of eligibility (of at least 15 months) immediately following the trial work period during which the benefits of a disabled person whose disability benefits were stopped because of work activity will automatically be reinstated if the person is unable to continue working in substantial gainful activity;

- continued Medicare coverage during the extended period of eligibility and for up to 24 months after a disabled individual's entitlement to disability benefits terminates because he or she has returned to substantial gainful activity;

- a provision that a person who becomes redisabled within 5 years after disability benefits stopped because he or she was no longer disabled does not have to serve a second 24-month Medicare waiting period if he or she had been previously entitled to Medicare; if he or she had not been previously entitled to Medicare, months of previous entitlement to disability benefits are counted as months in the current Medicare waiting period;

- a provision that a person who becomes redisabled within 5 years after disability benefits stopped because he or she was no longer disabled does not have to serve a second 5-month waiting period for disability benefits; and

- the deduction of the cost of impairment-related work expenses incurred by a disabled person from his or her gross earnings before determining whether he or she is engaging in substantial gainful activity.

I believe we can do more to improve the disability program so that more of our beneficiaries will be encouraged to return to work. Therefore, I have asked the Disability Advisory Council, mandated by P.L. 99-272, to explore ways in which we can remove barriers that too often discourage beneficiaries from seeking gainful employment. I expect the Council to address the matter you raised in the context of its broader deliberations on work disincentives.

In addition to seeking to enhance incentives to work and removing disincentives, the Council will study ways to make more effective use of vocational rehabilitation and work evaluation techniques to improve the chances that beneficiaries will be rehabilitated and return to gainful work. The Secretary of HHS will transmit the Council's report to the Congress.

In addition, we are carrying out experiments and demonstration projects to test the effectiveness of various ways of encouraging disabled beneficiaries to return to work, including a demonstration project that we believe will produce data which will demonstrate to employers that hiring disabled beneficiaries will not adversely affect their employee health care costs.

FAMILY SUPPORT ADMINISTRATION

STATEMENT OF WAYNE A. STANTON, ADMINISTRATOR

ACCOMPANIED BY:

MICHAEL L. STURMAN, ASSOCIATE ADMINISTRATOR FOR FINANCIAL MANAGEMENT

WILLIAM BELDON, BUDGET OFFICER, OFFICE OF THE ASSISTANT SECRETARY FOR MANAGEMENT AND BUDGET, DEPARTMENT OF HEALTH AND HUMAN SERVICES

PREPARED STATEMENT

Senator CHILES. Now we will hear testimony on the budget request for the newly created Family Support Administration. This agency was presumably created to highlight the administration's concern for the family, but every discretionary program under its jurisdiction is proposed to be deeply cut or eliminated. Only the entitlements under AFDC and child support enforcement appear to be growing.

Hundreds of thousands of impoverished families are served through the community service's broad grant, and that is proposed to be phased out over a 4-year period with a first-year cut of $58 million.

Refugee and entrant assistance is proposed to take an $86 million cut, including elimination of targeted assistance for the heavily impacted areas around the country.

The Work Incentive Program currently funded at $103 million which aims to help welfare recipients find permanent unsubsidized jobs is eliminated.

The Low-Income Home Energy Assistance Program is cut $585 million, enough to provide heating and cooling assistance for 2 million households, many of the elderly people who might otherwise have to choose between food and shelter costs.

The Administrator of Family Support, Mr. Wayne Stanton, is here to explain these budget proposals.

Mr. Stanton, if you would summarize your opening statement we will include it in full in the record.

[The statement follows:]

STATEMENT OF WAYNE A. STANTON

I am pleased to have the opportunity to appear before you today to discuss the fiscal year 1988 budget request of the Family Support Administration.

The Family Support Administration's mission is to serve as a focal point in the Department of Health and Human Services for programs that enhance and support the American family. By creating this new agency in April 1986, Secretary Bowen has demonstrated his commitment to the President's goal of strengthening the American family unit. Consolidating family support programs in one agency strengthens program coordination, provides a single focal point of contact for States and other interested parties for their interaction with the Federal government, and permits development of uniform strategies to encourage self-sufficiency and reduced dependency on public resources.

The Family Support Administration (FSA) was created by consolidating five separate components from other operating divisions into a new principal operating division of the Department of Health and Human Services.

These components now constitute the five program offices of the new Family Support Administration:

Those which were formerly components of the Social Security Administration include:

- Office of Family Assistance, which administers the Aid to Families with Dependent Children program;

- Office of Child Support Enforcement, which oversees the Title IV-D Child Support Enforcement program; and

- Office of Refugee Resettlement, which administers the program for domestic refugee and entrant resettlement.

Other components include:

- Office of Community Services, which administers the Community Services Block Grants and the Low Income Home Energy Assistance Program (LIHEAP). This Office was moved from the Office of the Secretary to FSA.

- Work Incentive Office which represents HHS in the administration of the Work Incentive (WIN) program. The WIN program is presently jointly-administered by HHS and the Department of Labor.

In addition, FSA was assigned by the Secretary of HHS responsibility for administering the new State Legalization Impact Assistance Grant (SLIAG) authorized by the Immigration Reform and Control Act of 1986 (Public Law 99-603). Secretary Bowen has also given the Family Support Administration lead agency responsibility for the Homeless and teen-age pregnancy initiatives.

The Family Support Administration is headed by an Administrator who is supported by a Deputy. Four Associate Administrators direct staff and support functions. These functions include management and information systems, financial management, communications, and policy formulation.

Central to the Fiscal Year 1988 budget request for Family Support Administration programs is the concept of family stability and self-sufficiency. We are deeply committed to the premise that low income families can be offered meaningful alternatives to long-term and crippling welfare dependency. We seek to strengthen the status of the American family and provide hope to the millions of children that might otherwise continue to be trapped in poverty and ultimate despair. We plan to achieve this by emphasizing efforts to dramatically increase the effectiveness of child support enforcement programs, to increase alternatives to welfare dependency through cost-effective work, training and educational opportunity programs, and to foster initiatives to cope with the critical problem of teenage pregnancy.

A total of $13 billion in new Budget Authority is requested in the President's fiscal year 1988 Budget to support the programs administered by the Family Support Administration under current law. This requested amount represents a reduction of $94 million in the amount available for these programs in fiscal year 1987.

Included in this request is $10.2 billion requested for Family Support Payments to States, a reduction of $170 million from the amount available in fiscal year 1987. We anticipate a small increase in program costs and numbers of beneficiaries in 1988. However, we will achieve a net reduction in program costs due to collections of pending disallowances for excess State AFDC payment errors and increased offsetting child support collections. Our budget request is composed of $8.4 billion for the Federal share of benefit payments for 11 million recipients, over $1.0 billion for the Federal share of State and local AFDC administrative costs, and $772 million for the Federal share of State and local costs of administering the Child Support Enforcement program.This budget request reflects our continued emphasis on significant improvements in child support collection efforts realized through the new enforcement tools provided by the 1984 Child SupportAmendments. In 1988, we anticipate total child support collections of over $3.9 billion, nearly $350 million more than this year and $750 million more than 1986. Of these total collections in 1988,

nearly $430 million represents an offset to the AFDC appropriation for collections made on behalf of AFDC recipients.

Fiscal year 1988 estimates in the President's budget for Family Support Payments also reflect savings that would be realized by enactment of several important legislative proposals in the amount of $468 million. Included among these proposals that require separate legislative action is our proposed Greater Opportunities through Work (GROW) Program. The GROW Program would require that adult employable AFDC recipients participate in work activities or training. We are also proposing legislation that would require States to have child support mandatory guidelines to be routinely utilized when setting individual support orders. The budget request before your Committee, however, is based on current law and we recognize that savings from our legislative proposals will only be realized when Congress separately acts on them.

For the Low Income Home Energy Assistance Program, we are requesting $1.237 billion in fiscal year 1988 to help meet home energy costs of low income households. While this represents an appropriations reduction of $585 million from fiscal year 1987, the availability to the States of petroleum overcharge settlement funds will enable the States to maintain, through prudent planning, current resource levels in helping meet the energy needs of low income households.

For the Refugee and Entrant Assistance program, an amount of $253 million is proposed for fiscal year 1988. This represents a reduction of $86 million. This funding level is based on the estimated arrival of 56,000 new refugees during fiscal year 1988 which is down from the 66,000 arrivals anticipated in fiscal year 1987. It also reflects a policy of providing subsidies for categorical cash and medical assistance through AFDC and Medicaid to all needy refugees and entrants for an initial 24 months after arrival in the United States instead of 31 months under present policy. Special funding for non-categorical cash and medical assistance for needy refugees will be limited to a refugee's first 12 months after arrival in this country instead of 18 months as under present policy. These changes in policy will help reduce the likelihood of unnecessary welfare dependence resulting from extended periods on assistance.

For the Community Services Block Grant program, we are requesting $310 million in fiscal year 1988. This amount represents a decrease of $58 million from fiscal year 1987 and reflects the first year of a proposed four-year phase-out of this program. The Administration is proposing this phase-out to allow local grantees adequate time to identify funding from other Federal, State, local and private sources. Other programs, particularly the Social Services Block Grant, already provide essentially similar services and can be used to fund those community services activities which are of the highest priority and deemed most effective.

We are requesting no funds for the Work Incentive (WIN) program in fiscal year 1988. This is consistent with Congressional action for fiscal year 1987. Congress provided only $103 million for transitional close-out funding of WIN grants for fiscal year 1987 with the expectation that WIN would be replaced. The President's budget proposal for Family Support Payments to States provides a replacement for the WIN program, known as the Greater Opportunities through Work (GROW) program. This new GROW program would be funded on an open-ended basis through the regular Title IV-A AFDC program.

An amount of $75.8 million is requested for program administration of the Family Support Administration and for research and evaluation projects. In prior years these administrative funds were provided separately to the agencies that formerly administered the components that now comprise the Family Support Administration. Economies of scale have been achieved by combining various administrative functions such as personnel and financial management into a central administrative body. The fiscal year 1988 request therefore reflects a reduction of $5.8 million in administrative expenses. This level is sufficient to fund a staffing level of 1,030 full-time equivalents, a reduction of 63 from fiscal year 1987. This request also reflects the phase-out of Interstate Child Support Enforcement demonstration projects. It is expected that the projects funded to date should provide sufficient data and experiences on innovative and most rewarding approaches to pursuing child support collections across State lines.

A total of $930 million remains available for States and $70 million for Federal costs and benefits for Immigration Assistance in fiscal year 1988 from a $1.0 billion appropriation under Public Law 99-603. We require no additional funds in Fiscal year 1988 for this program.

In closing, this proposed budget reflects our objective of providing maximum return to the taxpayers for dollars spent. This request proposes savings and economies where certain programs are no longer effective, are unnecessary, or are duplicative of other resources. At the same time, it re-focuses our resources on those critical areas where the self-sufficiency and independence of the American family can be greatly enhanced.

Thank you, Mr. Chairman. My colleagues and I will be happy to answer any questions you and the Committee may have.

INTRODUCTION OF ASSOCIATES

Mr. STANTON. Thank you, Mr. Chairman. As you indicated, I have submitted a statement for the record.

I would like to introduce a couple of associates here if I might. Mr. Sturman is our Associate Administrator for Financial Management. Mr. Beldon is from the Office of the Assistant Secretary for Management and Budget of Health and Human Services.

FSA PROGRAMS

As you indicated Mr. Chairman, when Secretary Bowen took over as HHS Secretary in January 1986, he indicated one of his priorities would be the strengthening of the family. One of his first steps in this objective was to put some of those programs which directly impact on the family via services and assistance payments together in one operational unit called the Family Support Administration.

Thus, he put assistance to families with dependent children and that program's work and training activities, child support enforcement, low-income energy assistance, refugee assistance, community service block grants, and a couple of Department special initiatives such as teenage pregnancy and the homeless problem together. He has later added the Immigration Reform and Control Act as it affects Health and Human Services to the FSA package.

It is our purpose, Mr. Chairman, to strengthen program coordination. We want to give the States a single point of contact for these vital programs in both the regions and at the Washington level. We are especially focusing on the cause and effect relationship between child support and AFDC.

Also, we are emphasizing, through proposed legislation, education and training in our AFDC Program. Similarly, we are concerned with all aspects of cost effectiveness and efficiency in our several programs and administrative processes.

The Family Support Administration 1988 budget request is for $13.050 billion in new budget authority. This is a decrease of $94 million in budget authority from 1987 under current law. Our priorities in 1988 include increasing the cost effectiveness of State operations.

Legislative proposals in the AFDC and Child Support Enforcement Programs are being proposed which reduce Federal matching payments for excessively high State AFDC administrative costs, a phaseout by 1990 of enhanced 90 percent Federal matching payments for AFDC and child support development of computer systems, thus encouraging States to either transfer at greatly reduced costs existing technology from other States or complete their systems development and to limit Federal child support enforcement incentive payments in cases where there are minimum State levels of cost effectiveness.

FSA is proposing an expanded initiative to replace the failed WIN Program. The GROW Program, greater opportunities through work, will stress continuing schooling especially for teenage mothers and remedial or basic education for adults on welfare with less than a high

school education and participation in job search, grant diversion, and other work or training-related activities for other employable AFDC recipients. Parents with younger children would be required to participate in education and/or training programs at an earlier stage than under current rules.

The Department intends to reduce the number of months from 31 to 24 in which it subsidizes States for assistance-provided refugees under the AFDC Program. This is intended to provide for a greater stimulus to the States to emphasize refugee self-sufficiency.

Due to lower energy costs and other energy resources available to States from low-income families, FSA proposes to modestly reduce the Federal appropriation for the Low-Income Home Energy Assistance Program. The Department is proposing a modest reduction in community service block grant funding as part of a long-term phaseout of this program which, we believe, duplicates already existing Federal programs.

I want to thank you, Mr. Chairman, and offer ourselves available to answer any questions.

LOW-INCOME ENERGY

Senator CHILES. All right, so you are proposing a cut of $585 million in the Low-Income Home Energy Assistance Program. That is a reduction of 32 percent on top of last year's 10 percent. That is a pretty good modest cut, 32 percent on top of 10. I am glad you have not figured out my budget for me with your word modest.

Mr. STANTON. Mr. Chairman, let me react to that by saying that the States received I think it was $2.2 billion in the *Exxon* settlement and also several hundred million in the *Stripper Well* settlement that we gave to the States for this purpose of helping with energy costs. The States have a huge amount of money left over that has not been spent in these areas. In fact, we gave them over $3 billion in these settlements and of that $2 billion remains unspent at the State level now for these programs.

We feel with the amount of money that we are allocating and with the amount of money that is presently available to the States there are adequate funds to continue with their present funding levels in helping these people.

Senator CHILES. How much data do you have as to whether the States are spending their money on low-income energy assistance or whether they are spending it on weatherization and other such projects?

Mr. STANTON. We have substantial evidence on that. I will also say in this regard that——

Senator CHILES. I would like you to present that for the record, if you will.

Mr. STANTON. All right, I will sir. I would be happy to.

[The information follows:]

Preliminary data collected by the Office of Energy Assistance, Family Support Administration, during January 1987 indicated that in fiscal year 1987, States had $169.7

million in oil overcharge funds available. Approximately $72.9 million has been spent for fuel assistance, $49.5 million for weatherization action, $6.5 million for both fuel assistance and weatherization, and $39.7 million for unspecified purposes, according to the data received from the telephone survey with the States.

WEATHERIZATION PROGRAM SUPPORT

Mr. STANTON. I want to make this point clear with respect to weatherization. I support the Weatherization Program, having administered these programs at the State level and at the local level, because it provides for a greater long-term saving in energy cost by proper weatherization. So States have increased their expenditures in that area, but there still remains, Mr. Chairman, about $2 billion in unspent money at the State level for weatherization and other energy assistance programs.

TARGETED ASSISTANCE

Senator CHILES. When Congress extended refugee assistance legislation last fall, it discontinued targeted assistance as a line item but it continued to authorize it. I have always supported targeted assistance funding to help localities that are heavily impacted by refugees and entrants such as Dade County in Florida.

Can you tell me how you plan to continue providing assistance to areas that are heavily impacted by refugees and entrants in fiscal year 1988 even though there is no specific budget request for the targeted assistance appropriations?

Mr. STANTON. Yes, Mr. Chairman; I would like to make this observation about that. I appreciate the problem that the States have had, but I want to recall to your recollection that this program began with the Cuban and Haitian situation in 1981 and 1982, at which time it was intended the Targeted Assistance Program would be a temporary program. I would call to your attention the fact that it is now many years old, as you obviously know from your experience.

We believe that these people have been very well assimilated now into society, and they have entered the total population as taxpayer citizens broadening the base of taxation for the States. With the money that is available through the social services block grant, title XX programs, et cetera, we feel it is time to cancel out that temporary program because we see the need no longer existing for those kinds of activities.

Senator CHILES. Have you taken into consideration the fact that you now have Nicaraguans and others coming in in literally the same numbers, certainly impacting my State in Dade County?

The number of Nicaraguans, the school superintendent was telling me, right now is causing him to have the equivalent of eight high schools, I think three or four junior high schools, and I think six elementary schools. That is simply for the Nicaraguans that are there and nobody else.

Mr. STANTON. Yes, sir; you are correct, Mr. Chairman, certainly. With respect to this program of refugees, however, that is different than the Targeted Assistance Program. It is a different kind of program. We anticipate about 10,000 fewer refugees in 1988 than we have in 1987, and

there is several million dollars already available from previous years to assist in this area. We are not totally reducing the Refugee Assistance Program.

Senator CHILES. How much available, $1 million?

Mr. STANTON. Several million dollars for targeted assistance from 1986, but we are also allocating $253 million for refugee assistance programs, and we are also proposing some other things, Mr. Chairman. I will provide that for the record. We have found several States that really are not doing a very good job in assimilating its population into the work force. California was mentioned earlier, and I would mention California that shows 90 percent of its refugee population on AFDC.

[The information follows:]

Fiscal year targeted assistance funds to States/counties[1]

State	*Fiscal year 1986 funding*	*State*	*Fiscal year 1986 funding*
California	$15,300,000	New Jersey	$800,000
Colorado	300,000	New York	1,300,000
Florida	9,900,000	Oregon	900,000
Hawaii	300,000	Pennsylvania	600,000
Illinois	1,600,000	Rhode Island	400,000
Kansas	400,000	Texas	700,000
Louisiana	300,000	Utah	200,000
Maryland	300,000	Virginia	800,000
Massachusetts	800,000	Washington	1,300,000
Minnesota	1,000,000		
Missouri	100,000	Total	37,300,000

[1] Does not include $4.8 million awarded to Florida—Dade County for entrant children education assistance, and $5.8 millin to Florida for entrant medical services and assistance. Total fiscal year 1986 targeted assistance was $47.9 million.

STIMULATING ACTIVITY

Mr. STANTON. We think, then, States need to do more, and they needed an added stimulus to get something going rather than simply collecting these Federal dollars. They need to get something going better in assimilating these people and job training efforts of work and placement. We need to stimulate them by energizing them a little bit with some reduction in funds to stimulate that activity.

We also propose, Mr. Chairman, to reduce the funding level of AFDC eligible refugees, from 31 to 24 months, again as a stimulus to these States to go forward and not wait until the people totally exhaust their eligibility before the State begins to think about doing something on their behalf.

I am reminded by one of my associates, Mr. Chairman, that the Nicaraguans are not considered refugees, apparently. So I appreciate the problem that they are causing in your area, but they are not classified as refugees.

Senator CHILES. You just raised what is another tremendous problem on the basis of what their classification is, but I do not know whether you have noticed that there was a recent Supreme Court decision that

indicates that if they make any kind of prima facie showing that they are fleeing persecution or in their own mind that they were fleeing persecution, they are a refugee.

Mr. STANTON. That is right, I would agree with you.

Senator CHILES. The impact on Dade County is just as great no matter what you want to call it. The impact is still there, and it is an impact that is not a State obligation. The State of Florida did not involve itself in any kind of activity in Central America. That is a National Government policy, and there ought to be some response from the National Government to assist a county and a State who are not a part of that policy but who are the recipients of the people that come up who are putting this burden on them.

Mr. STANTON. I agree, sir.

REFUGEE SOCIAL SERVICES

Senator CHILES. Well, your budget justification and you said in your statement that the normal social service allocations are going to be sufficient to meet these needs, but that kind of conflicts with your proposal that you are going to reduce the social service funding, the $45.5 million compared to the $68.6 million that you had in 1987.

Mr. STANTON. Mr. Chairman, as I mentioned, refugee levels will be down by about 10,000 in 1988, which is the reason fewer dollars are needed for social services than you see in our budget here.

COMMUNITY SERVICES BLOCK GRANT

Senator CHILES. Well, I am looking at your community services budget justification now, the document that you have here.

Mr. STANTON. Our Community Service Program was reduced by $58 million, as you indicated in your preliminary comment. We anticipate and we would like the Congress to consider a phasing out of this program because we feel it is duplicative of other existing kinds of Federal programs, one of which would be the title XX program which is funded entirely separate of this program through the Office of Human Development Services to provide assistance. That is our position in that regard.

Senator CHILES. Well, for several years the administration has proposed an immediate termination of the community services block grant and related activities. Now are you talking about changing that policy? Your statement says a gradual phaseout over 4 years?

Mr. STANTON. Yes, sir; we are not proposing an abrupt cancellation, but we are asking the Congress and the States to make adjustments for a gradual phasing out of the program over a 4-year period of time.

Senator CHILES. Well, that is some help from what the policy used to be. Last year, GAO issued a report which said the community services block grant activities for the poor are, and I quote, "necessary, unique, and nonduplicative." In light of that GAO report, which is the rationale to now phase out the community services block grant?

Mr. STANTON. I think, Senator, I would not have anything additional to comment other than what I already commented on this morning, but I think that we would disagree with the GAO comments in that regard. From personal knowledge as an administrator at the State and county levels, I have seen duplicate kinds of activities.

HOMELESS CLEARINGHOUSE

Senator CHILES. Your budget justification states that the needs of the homeless are addressed through the continued operation of the homeless clearninghouse.

When was the homeless clearinghouse created, and where did you get the money to fund that?

Mr. STANTON. Senator, I suspect you are talking about a program being proposed in new legislation—the clearinghouse area is in one of the new pieces of legislation that is before the House. We have not established an official clearinghouse in the homeless area of our Department.

We have, however, a task force in Health and Human Services that coordinates with about 15 other Federal agencies. Our task force facilitates the sharing of information about what one region is doing or one city or one community is doing for States, and we work as a coordinating agency between these other operations and with local community people in assisting that area.

As far as the funding of the clearinghouse, I believe that has reference to a proposed piece of legislation that is now in the House.

WIN PROGRAM

Senator CHILES. On July 1 of this year, Federal funding for the existing job training program for welfare recipients, the WIN Program, is scheduled to end. My understanding is under that program the Federal Government pays up to 90 percent of the cost of the State-sponsored education and training programs for welfare recipients.

Now, the administration has proposed a new program, which by the way will not be in place by the time the WIN funding ends, but that program will not pay any of the cost of job training or remedial education which the States provide for welfare assistance recipients. Is that correct?

Mr. STANTON. No, sir; part of what you said I would like to agree with, but the Congress decided to phase out the WIN Program effective this July by action of the last Congress, and it directed us to distribute all the funds for expenditures by July of this year.

So it intended by its legislative language that it was to pass a new kind of work and training program. We are proposing in HHS a program we call the GROW Program, greater opportunities through work. We intend to change the funding from the former WIN Program. As Congress decided, and as we certainly agree, the WIN Program has not been effective, efficient, and done the job that we hoped.

We are proposing that the GROW Program replace it at 50 percent Federal funding, 50 percent local funding, but it is presumed that we will pay for daycare services and transportation as part of that funding package in the GROW Program.

We also propose that this program change from the WIN aspects to include especially——

Senator CHILES. So daycare, you said. I did not hear you say training.

Mr. STANTON. Training and transportation, also. I dropped training. You are correct.

We do not feel, however, in many instances that the training, per se, fits in the welfare department or in the human services department but in the labor department or the school system where the training will be provided and is provided at the present time.

So there is a question mark as to whether or not the training per se would need to be funded by this budget amount. We have taken the cap off of this program as opposed to the WIN and say that there is no limit, and we will fund it 50 percent, whatever the States wish and need and the program that they set up to serve.

We have also proposed that younger persons, especially teenage mothers—and I would point out, Mr. Chairman, that some of the regions now advise me that the new applications for AFDC include 50 percent unwed mothers coming onto the AFDC Program. Many of those are high school dropouts.

We are proposing now for the first time that we consider for those persons being placed in training and employment, they need to go back to school. We want them to go back to school, and we want them to get that high school education or to get that GED on which we can build them a better training program at a subsequent time or make them eligible for employment. That is part of our whole program which we are proposing to the Congress through our GROW initiative as a replacement for the WIN Program which the Congress decided it would cancel out this July.

QUESTIONS SUBMITTED BY THE SUBCOMMITTEE

Senator CHILES. We have a couple of additional questions, and we will ask those for the record.

[The following questions were not asked at the hearing but were submitted to be answered for the record:]

Questions Submitted by the Subcommittee

CUT IN ENERGY BUDGET

Question. You are proposing a further cut of $585 million in the Low-Home Energy Assistance Program for fiscal 1988 - a reduction of 32 percent on top of last year's 10 percent cut.

What assurance is there that lower oil prices and the availability of oil overcharge funds will offset the cut you recommend to prevent a reduction in services to low-income people - many of whom are elderly?

Answer. The court orders governing the distributions of $3.190 billion oil overcharge funds state that State governments are familiar with the particular energy needs of their citizens, and therefore they are in the best position to select the specific programs that will most effectively provide restitution to their citizens. Both court orders specifically cite LIHEAP as one of five Federal programs eligible to receive distributions. The court orders mandate that States "fund existing or new low-income programs in a manner that provides low-income consumers with an equitable share of the funds allocated to each State".

Question. Historically, the Low-Income Home Energy Assistance program has reached less than a third of those eligible for services.

How many more eligible households could be served with the $585 million you propose to cut?

Answer. The real issue is the total resources available to States for energy assistance, regardless of source. The combination of the President's LIHEAP request and available oil overcharge funds is significantly larger than previous Federal appropriations. States would need to utilize an average of only 19% of their oil overcharge funds to offset the recommended changes in Federal grants to States.

REFUGEE TARGETED ASSISTANCE

Question. When Congress extended refugee assistance legislation last fall, it discontinued targeted assistance as a line-item, but continued to authorize it. I have always supported targeted assistance funding to help localities heavily impacted by refugees and entrants, such as Dade County in Florida.

Can you tell me how you plan to continue providing assistance to areas heavily impacted by refugees and entrants in fiscal 1988, even though there is no specific budget request for targeted assistance appropriations?

(Background: Targeted assistance was funded at $50 million in Fiscal 1986; the Fiscal 1987 Continuing Resolution directed that the program be continued utilizing unspent carryover funds.)

Answer. The targeted assistance program was initiated in FY 1982 in response to the impact of large numbers of Cuban and Haitian entrants who arrived during fiscal years 1980 and 1981. The following year the targeted assistance program was broadened to also take into account the large numbers of refugees who arrived in fiscal years 1980, 1981, and 1982. The numbers of new arrivals have been at much lower levels during subsequent years.

This temporary program has been continued at artificially high levels under continuing resolutions for FY 84 - 86 and existing funding is sufficient to continue most targeted assistance projects through at least March 31, 1988 -- more than seven years after the large influx of entrants and six years after the large influx of refugees.

Since its inception, the targeted assistance program has provided $291,850,000 to 20 States with impacted counties.

Several years have passed since the U.S. received large numbers of refugees and entrants. The Federal government has provided sufficient funds to offset the impact of those refugees and entrants and special targeted assistance funding can no longer be justified. Ongoing needs of refugees and entrants are intended to be addressed through the regular refugee social service funding which is based on a statutory formula taking into account the number and distribution of arrivals who have reached the U.S. during the preceding three years.

REFUGEE SOCIAL SERVICES

Question. The budget justification indicates that "normal social services allocations will be sufficient to meet continuing service needs" (p. 83) for refugees covered in the past by targeted assistance funds.

Doesn't this assertion conflict with your proposal to reduce social service funding to $45.5 million, compared to $68.6 million appropriated for fiscal 1987?

Answer. The $45.5 million requested for FY 1988 for social services is based on the number of refugees expected to arrive during the three-year period FY 1986-1988.

The figure of $68.6 million, which you cite, is an amount that was provided under recent Continuing Resolutions, and it is artificially high--reflecting higher arrivals than we have actually experienced during the last few years. The lower figure addresses the needs of refugees who have arrived during the last three years, given the statutory formula on which the allocation of social service funds is based.

Question. Social service funding is normally restricted to use for refugees and entrants who have been here 36 months or less, while there is no such restriction on the use of targeted assistance.

Given this restraint, would it be possible to substitute social service funds for targeted assistance for such areas as Miami, where many of the Cuban-Haitian entrants have been since 1980?

Answer. Social Services funding will be continued to Florida, and these funds may be earmarked for Miami subject to the normal allocation restrictions for these funds. The refugee program is a transitional program to help refugees during their initial period of adjustment only. Their longer term service needs can be met through the mainstream public and voluntary programs that serve the other residents of the communities in which they live. After three years, States and localities can address the service needs of refugees through the mainstream resources through which services are provided to U.S. citizens and immigrants in the same communities -- for example, the States' Federal Social Services Block Grant funds under title XX of the Social Security Act.

COMMUNITY SERVICES PHASE OUT

Question. For the last several years, the Administration has proposed immediate termination of the Community Services Block Grant and related activities.

Why are you now changing your policy to request a gradual, four-year phase-out of the program?

Answer. Phasing out the Community Services block grant program over a four-year period allows grantees to generate funds from other Federal, State, local and private sources. Four years will be ample time since these funds provide only 12 percent of Community Action Agency funding.

GAO REPORT ON COMMUNITY SERVICES

Question. Last year, GAO issued a report which said that Community Services Block Grant activities for the poor are "necessary, unique and non-duplicative."

In light of the GAO report, what is your rationale for proposing to phase out the Community Services Block Grant?

Answer. The Community Action Agencies receiving the money may be unique, but most of their money comes from other sources. The purpose of the Community Services Block Grant, CSBG, program is similar to other service authorities including the $2.7 billion Social Services block grant program, the $1.2 billion Low Income Home Energy Assistance program, and the $1.1 billion Head Start Program. Other similar authorities include community development, job training and other funding sources

available to assist States in delivering services to those in need. The CSBG program administratively duplicates these other programs.

Remaining funds are largely used to defray administrative expenses incurred by Community Action Agencies in delivering many of the services mentioned above. However, these funds provide only about 12 percent of total Community Action Agency funding, and therefore phase-out of these funds should not threaten CAAs which perform effectively.

Therefore, FY 1988 will be the first year of a four-year phase-out of this program. The period should be more than enough to allow grantees to generate alternative sources of funds from other Federal, State, local and private sources.

HOMELESS CLEARINGHOUSE

Question. Your budget justification states "the needs of the homeless are addressed through continued operation of the Homeless Clearinghouse." (page 116)

When was the Homeless Clearinghouse created, and where did you get the money to fund it?

Answer. The 1988 Budget requests $250,000 in each of fiscal years 1987 and 1988 to establish a Homeless Clearinghouse in HHS. HHS will forward a reprogramming request for 1987 in the near future. In the meantime, the Homeless Task Force in HHS is doing much of the work the Clearinghouse would do.

Question. How much is budgeted for fiscal 1988, and what activities will be undertaken by the Homeless Clearinghouse?

Answer. The FY 1988 budget request for the Homeless Clearinghouse is $250,000. The Clearinghouse will serve as the Federal focal point for information and technical assistance, helping States and communities develop strategies and package resources to help the homeless. It is expected that the Clearinghouse will include information on Federal and other resources available to help the homeless and how to obtain them, descriptions of model programs and how they work, information on issues such as zoning problems that are of interest to the food and shelter community, the publication and distribution of a regular newsletter, community emergency services numbers, summaries and information on studies and research, and publication of resource manuals.

CONCERN FOR HOMELESS

Question. Last year, OMB Director Miller was quoted in the press as citing the Community Services Block Grant to show that the Federal government is indeed helping the States deal with the homeless.

How much assistance to the homeless is being provided by the Community Services Block Grant?

Answer. Clearly, the homeless qualify for this program, but we are not able to say how many actually are being helped by it. We estimate that $43-60 million in CSBG funds was spent in fiscal year 1985 for emergency services, which would include assistance to prevent or eliminate homelessness. Figures for later years are not yet available, but we do not expect that they would have changed significantly. Congress gave local grantees the authority to spend CSBG as they choose so long as it is to alleviate poverty. This flexibility makes it diffucult to determine the exact amount spent on the homeless, and would also frustrate any attempt to earmark funds for the homeless, since non-earmarked funds could be shifted to other uses the local agency may prefer.

WORK INCENTIVES (WIN) PROGRAM

Question. On July 1st of this year, Federal funding of the existing job training program for welfare recipients -- the WIN program — is scheduled to end.

Is it correct that under the WIN program the Federal government pays up to 90% of the cost of State sponsored education and training programs for welfare recipients?

Answer. No. Section 402 of the Social Security Act requires that a State plan for aid and services to needy families with children must provide for arrangements to assure that there will be made a 10 percent non-Federal contribution to the Federal assistance costs of the work incentive programs, as specified in section 435, by appropriate State agencies or private organizations. This 10 percent State match applies only to the resources appropriated for WIN. States may be sponsoring education and training programs for welfare recipients under other Federal or State authorities which may have no matching provisions or matching amounts different than required in WIN. This limited State match means States break even in programs that save $2 in benefit payments for each $10 spent on training.

Question. Now, the Administration has proposed a new program — which, by the way, will not be in place by the time WIN funding ends -- but that program will not pay any of the costs of job training and remedial education that States provide for welfare recipients.

Is that correct?

Answer. For FY 1987 Congress appropriated resources for WIN to be obligated within the first nine months of the fiscal year in the expectation that a replacement program would be enacted by July 1, 1987. If this does not happen, States can continue to run WIN through the end of FY 1987 with obligated balances, and coordinate services with other programs that

provide job search and training for AFDC recipients such as the $1.8 billion Job Training Partnership Act (JTPA) block grant.

The Administration's new program, Greater Opportunities through Work (GROW), attempts to prevent welfare dependency. One of the principal features of GROW is a requirement that mothers and children receiving AFDC aged 16 through 18 who have not completed high school would have to return to high school or to a comparable program leading to a diploma. The cost of this requirement and of arrangements for alternative basic education programs would be a State responsibility as is virtually all other basic education costs for a State's residents. The Administration also has proposed reforming the JTPA summer youth employment and training program to target resources on youth in welfare families and to allow local areas to use the $800 million proposed for this program for year round remedial training for youth in AFDC families, for subsidized summer jobs, or for both activities. This proposal was developed in coordination with GROW and was designed to ensure that AFDC youth in the greatest need will enter JTPA.

AFDC recipients age 19 or over would be required by GROW to participate in a variety of activities which have proven effective in increasing employment rates among AFDC recipients. These programs could include job search, community work experience, remedial education, and other State-designed activities approved by the Secretary. Any of these programs can be coordinated with Federal programs already assisting welfare recipients such as the $1.8 billion JTPA block grant or the $652 million Job Corps residential job training program also financed under JTPA, and the adult education programs where financing is being doubled by 1992. GROW will pay for supportive services to enable welfare recipients to participate in job training programs.

Question. Why — in light of the recent news of successful WIN Demo programs around the country — would you suggest to this committee that we stop funding a program with new found success in training and placing welfare recipients in jobs and then begin funding a program for welfare recipients which will not pay for job training?

Answer. As this Committee recognized last year virtually all observers agree that the regular WIN program has failed to help AFDC recipients or applicants achieve self-sufficiency. It should not be continued. However, the WIN Demos have developed some program models that have shown some success in certain States. GROW does not abandon the WIN Demo concept; it builds upon it and improves it. One of the things we have learned is that because the AFDC population is not homogeneous and varies by locality, States need substantial flexibility to shape programs to best meet the needs of their AFDC populations. GROW gives States that flexibility. GROW also emphasizes early intervention for prevention. Research shows that women with less education and limited work experience tend to spend longer periods of time on AFDC. A major focus of GROW is to target education, employment, and training activities --

together with necessary support services -- to recipients who are just beginning to receive welfare.

As a result, the GROW proposal will place many more employable welfare recipients in activities that will promote self-sufficiency than the current WIN programs and will focus special attention on potential long term dependents. It will target its funds on work activities and support services and use existing programs such as JTPA to provide job training. Further, it will also allow States to incorporate programs developed as WIN Demos which have already proved their effectiveness.

Question. Wouldn't we be sending exactly the wrong signal to the States about where we should both put our scarce dollars?

Answer. No. The GROW proposal is designed to encourage States to coordinate with other programs to make the best use of scarce resources by promoting efficiency and flexibility and eliminating program duplication. It places responsibility for basic education and training at the high school level with the States, who have this responsibility for all other residents, and looks to JTPA and other sources to provide education and training assistance for older youth and adults who continue to need help in becoming job ready. For other activities, including job search and work experience, GROW provides open-ended Federal matching. We believe we should support funding of these activities since they are the only work programs proven cost-effective in reducing welfare dependency and increasing earnings of participants.

CHILD SUPPORT INTERSTATE FUNDING

Question. Your budget does not request appropriations to continue Interstate Child Support Enforcement activities, for which $15,000,000 was provided in fiscal 1987.

What is the rationale for discontinuing this activity?

Answer. We do not believe that further funding of Interstate Child Support Enforcement demonstrations is necessary to maintain an interstate enforcement emphasis. This program was entered into for demonstrating new and innovative approaches to processing interstate cases. By the end of FY 87 almost $34 million will have been made available and at least 41 States will have participated in an interstate demonstration. States can exploit knowledge gained via demonstrations with the regular matching funds.

The State's major focus of attention during the life of this program has been developing interstate computer communication networks for child support enforcement. We need to move away from a demonstration phase in which regions or groups of States may develop divergent communications systems and move into an implementation phase. FY 87 and carryover FY 86 funds are sufficient to complete this system.

Automated case tracking and case management technology already developed from these grants is being transferred to other States to facilitate standardization and speed in processing interstate child support cases. Information obtained is also being channeled into perfecting a national clearinghouse system for child support enforcement.

Other areas outside of the interstate program where we have moved to implement what has been learned about barriers to interstate collections are discussed below. For example, in response to the need for more uniformity and timely processing of interstate actions, OCSE has facilitated the development of standardized forms. OCSE developed an Interstate Transmittal form for use in requesting interstate actions outside the URESA process. A separate package of forms has been developed for requesting URESA actions. The URESA Action Request form serves as a transmittal and is in use now. The following additional URESA forms are ready for printing: Uniform Support Petition, Paternity Affidavit, General Testimony for URESA, Judges Certificate and Order, Order and Judgement.

A Notice of Proposed Rulemaking (NPRM) on interstate child support enforcement also was published in the Federal Register on December 2, 1986. We are currently reviewing the public comments received and are preparing the final rule which should be published in the Federal Register this spring. The final rule will help clarify communication between States and improve interstate enforcement.

Question. Why are there no funds requested for research and evaluation, for which $3,150,000 was appropriated in fiscal 1987?

Answer. Funds are requested in the FSA Program Administration account. We have plans to fund $2,750,000 in research and evaluation in FY 1988.

DEMONSTRATION PARTNERSHIP INITIATIVE

Question. Last year Congress approved $1 million for pilot projects aimed at improving services to the poorest of the poor.

When will regulations be published to implement this new "Demonstration Partnership Initiative"?

(Background: Senator Proxmire sponsored the Committee amendment in the fiscal 1987 Labor-HHS bill to fund this newly authorized program.)

Answer. A special Task Force within the Office of Community Services (OCS) is developing this program. The program announcement will be published in the near future. OCS expects to be reviewing applications this summer and making grant awards by the end of this fiscal year.

GROW

Question. Your proposal to replace the Work Incentive Program (WIN) with the Greater Opportunties through Work (GROW) program would appear to more than triple Florida's AFDC caseload requiring employment and training services.

To what extent can States be expected to bear the employment and training costs - and, in addition, child care and transportation services for clients?

(Background: Florida estimates the GROW program would require employment and training services for 70,000 AFDC recipients, compared to the current level of 20,000. Assuming an average cost of $5,800 per trainee (the experience under the Job Training Partnership Act), this would cost $290 million in Florida alone.)

Answer. We expect States to meet their early year targets by encouraging children and young mothers to stay in high school. In later years, costs will be more than offset by benefit savings. As far as child care and other support services are concerned, since States receive half the benefit savings, it makes sense for them to pay half the costs. States have the option of using a mix of programs designed to keep costs manageable while providing good services. The Manpower Demonstration Research Corporation (MDRC) studies have shown that programs costing as little as $600 per person can effectively reduce dependency. For most expenditures under the GROW program, States will bear only 50 percent of the costs. Federal matching funds at a 50 percent level will be provided to help States meet the costs of operating GROW and providing necessary supportive services, such as child care and transportation. Unlike the WIN program, these funds will be available on an open-ended basis.

Matchable costs under GROW include costs of operating job search and placement programs, work experience programs, and work supplementation, or grant diversion, programs; general administrative costs such as costs of assignments and referrals, costs of monitoring and recordkeeping, and program staffing; and costs of necessary supportive services for any GROW participant.

The only expenditures for which Federal matching funds are not available under GROW are the direct costs of providing education and training. Federal funds for training are provided under the Job Training Partnership Act, JTPA, and we anticipate increased services for AFDC recipients. Also, the Administration is proposing substantial increases in Federal funding for adult basic educational and literacy programs over the next five years.

LOW INCOME ENERGY

Question. Congress provided $1,825,000,000 for the fiscal 1987 Low-Home Energy Assistance program, a cut of about 10 percent.

Did this result in serving fewer households or providing reduced or restricted benefits, compared with fiscal 1986?

Answer. The reduction in Federal appropriations for LIHEAP between Fiscal Years 1986, post Gramm-Rudman-Hollings, and 1987 was $185,296,000. Twenty-four States received a total of $169,748,580 in oil overcharge funds. Because of the flexibility of the LIHEAP block grant and the variety of options available to States to adjust to changes in need and funding levels, we do not have sufficient data to determine how the States adjusted to the reduction in Federal appropriations.

Question. To what extent are low energy prices stretching the ability of Federal funding to serve eligible households?

Answer. The real issue is the total resources available to States for energy assistance, regardless of source. The combination of the President's LIHEAP request and available oil overcharge funds is significantly larger than previous Federal appropriations. States would need to utilize an average of only 19% of their oil overcharge funds to offset the recommended changes in Federal grants to States.

Question. To what extent are allocations of oil price overcharge funds supplementing Low-Income Home Energy appropriations?

Answer. Our January 1987 phone survey indicated that 24 States received $169,748,580 in Fiscal Year 1987. Fifteen of those States expended an amount that was in excess of their LIHEAP appropriation from the previous year.

REFUGEE TARGETED ASSISTANCE

Question. The fiscal 1988 budget request does not include a request for refugee and entrant targeted assistance funds. The budget justification states that, "funding already provided will continue assistance through March 1988" (p. 83).

How much money would be required to continue targeted assistance funding at the current rate for the remaining six months of fiscal 1988?

Answer. We estimate that less than $29 million would continue these programs at current operating levels. This amount would include a continuation during FY 1988 of the special funding of about $11 million for the Dade County, Florida, public schools and Jackson Memorial Hospital in Miami, as well as funding through the end of FY 1988 for the existing targeted assistance programs in some 20 States.

Question. With no targeted assistance funding, how would you propose to help areas heavily impacted by refugees and entrants meet the continuing high costs?

Answer. The targeted assistance program, as we have indicated, was established to address impacts resulting from

the high numbers of refugees and Cuban and Haitian entrants who arrived during fiscal years 1980, 1981, and 1982. The numbers of arrivals during the last several years have been at much lower levels, and regular refugee social service allocations are the appropriate means of funding services in FY 1988.

LOW INCOME ENERGY

Question. What progress was made during FY 1986 in increasing the proportion of the eligible population served by the Low-Income Home Energy Assistance Program (LIHEAP) above the 30 percent you estimated for FY 1985?

Answer. Data from 1986 indicates that 6.7 million LIHEAP households or 29% of the 23.4 million eligible were served in FY 1986.

	Fiscal Year				
Households	1982	1983	1984	1985	1986
LIHEAP households	6.2 m	6.8 m	6.8 m	6.8 m	6.7 m
Income Eligible households	22.0 m	22.2 m	23.4 m	22.8 m	23.4 m
Proportion	28%	31%	29%	30%	29%

Question. What do you expect for FY 1987?

Answer. We do not yet have data regarding fiscal year 1987, but we estimate that the proportion of eligible population served by LIHEAP will remain constant at approximately 30%.

Question. Are we simply stuck with a service level of about 30 percent of those eligible?

(Background: Last year, the Department indicated that there was still a substantial gap between the number of households served by the LIHEAP and those who are potentially eligible. Indeed, the proportion of eligible households served changed very little over the 1982-1985 period surveyed.

	Fiscal year			
Households	1982	1983	1984	1985
LIHEAP households	6.2 m	6.8 m	6.8 m	6.8 m
Income eligible Households	22.0 m	22.2 m	23.4 m	22.8 m
Proportion served	28%	31%	29%	30%

Answer. The one-third eligible figure is based on households that are eligible at the maximum criteria specified in the Statute—150% of the poverty level or 60% of a State's median income, whichever is greater. These Federal maximums are relatively liberal, making roughly one household in four eligible for assistance. Most States set more restrictive eligibility criteria to target assistance on the neediest households. Using the State criteria, the LIHEAP participation rate is about 50%. This rate for a special purpose assistance program compares fairly well with the 65% participation rate in the Food Stamp program and participation by the elderly in the SSI program.

Question. Can you give the Committee a State-by-State summary of the oil overcharge distributions to date?

Answer. The Department of Energy has provided HHS with data regarding the oil overcharge distributions to the States. We have summarized the data on the attached table.

OIL OVERCHARGE DISTRIBUTION SUMMARY
(DOLLARS IN THOUSANDS)

STATE	TOTAL
ALABAMA	$ 49,293
ALASKA	12,661
AMERICAN SAMOA	622
ARIZONA	32,483
ARKANSAS	38,934
CALIFORNIA	299,946
COLORADO	34,394
CONNECTICUT	52,668
DELAWARE	14,793
DIST. OF COL.	7,161
FLORIDA	147,985
GEORGIA	71,672
GUAM	4,503
HAWAII	22,127
IDAHO	13,473
ILLINOIS	148,661
INDIANA	78,922
IOWA	42,141
KANSAS	37,691
KENTUCKY	41,252
LOUISIANA	78,073
MAINE	22,832
MARYLAND	55,667
MASSACHUSETTS	105,885
MICHIGAN	110,116
MINNESOTA	55,053
MISSISSIPPI	43,458
MISSOURI	63,401
MONTANA	14,315
NEBRASKA	23,462
NEVADA	13,255
NEW HAMPSHIRE	14,433
NEW JERSEY	113,983
NEW MEXICO	20,598

NEW YORK	239,642
N. MARIANA IS.	200
NORTH CAROLINA	70,272
NORTH DAKOTA	12,074
OHIO	121,875
OKLAHOMA	40,016
OREGON	31,947
PENNSYLVANIA	147,167
PUERTO RICO	29,636
RHODE ISLAND	12,185
SOUTH CAROLINA	37,625
SOUTH DAKOTA	11,519
TENNESSEE	51,872
TEXAS	238,470
UTAH	19,271
VERMONT	7,409
VIRGIN ISLANDS	14,904
VIRGINIA	80,331
WASHINGTON	49,543
WEST VIRGINIA	19,161
WISCONSIN	55,884
WYOMING	13,213
Grand Total	$3,190,129

LOW INCOME ENERGY

Question. What do your surveys of the States show as to the extent the States are choosing to use this money for LIHEAP activities, and which LIHEAP activities (heating assistance, cooling assistance, emergency assistance, and weatherization aid)?

(Background: The Federal government has now distributed to the States nearly $3 billion in moneys collected out of oil price overcharge settlements. This money can be used for LIHEAP activities and other energy-related purposes.)

Answer. Our winter phone survey which was conducted during the last week of January 1987 indicated that 24 States expended $169,748,580 through the LIHEAP program in Fiscal Year 1987. We requested but did not receive complete responses regarding which types of LIHEAP activities were funded by oil overcharge funds. The attached chart details our knowledge of the uses and amount of oil overcharge funds by States. The Department of Health and Human Services does not receive information regarding the amount of oil overcharge funds disbursed for purposes other than LIHEAP.

USE OF OIL OVERCHARGE FUNDS /1

STATE	TOTAL OIL OVERCHARGE FUNDS	FUEL ASSISTANCE	WEATHERIZATION	COMBINED	UNSPECIFIED
TOTAL	$169,748,580	$72,929,507	$49,542,482	$6,500,000	$39,659,452
ALABAMA	$ 2,400,000	$ 2,400,000			
ALASKA					
ARIZONA					
CALIFORNIA	$ 21,000,000				$21,000,000
COLORADO					
CONNECTICUT	$ 6,000,000	$ 6,000,000			
DELAWARE					
DIST. OF COL.					
FLORIDA					
GEORGIA	$ 10,009,452				$ 10,009,452
HAWAII					
IDAHO					
ILLINOIS					
INDIANA					
IOWA					
KANSAS	$ 3,097,507	$ 3,097,507 3/			
KENTUCKY					
LOUISIANA					
MAINE	$ 7,800,000	$ 200,000	$ 7,600,000		
MARYLAND	$ 4,300,000	$ 4,300,000			
MASSACHUSETTS	$ 6,400,000		$ 5,850,000		
MICHIGAN	38,600,000	$ 38,600,000			
MINNESOTA	$ 5,500,000			45,500,000 4/	
MISSISSIPPI	$ 92,000	$ 92,000 5/			
MISSOURI	$ 500,000	$ 500,000			

USE OF OIL OVERCHARGE FUNDS [1]

STATE	TOTAL OIL OVERCHARGE FUNDS	FUEL ASSISTANCE	WEATHERIZATION	COMBINED	UNSPECIFIED
MONTANA	$ 392,985				
NEBRASKA					
NEVADA	$ 500,000	$ 500,000			
NEW HAMPSHIRE					
NEW JERSEY					
NEW MEXICO	$ 2,250,000			$2,250,000[6]	
NEW YORK	$ 14,500,000		$ 14,500,000		
NORTH CAROLINA	$ 640,000	$ 640,000			
NORTH DAKOTA					
OHIO					
OKLAHOMA	$ 4,400,000			$4,400,000	
OREGON	$ 2,184,236				
PENNSYLVANIA	$ 30,000,000	$10,000,000	$20,000,000		
RHODE ISLAND					
SOUTH CAROLINA	$ 5,092,400	$ 3,500,000	$ 1,592,482		
SOUTH DAKOTA					
TENNESSEE	$ 1,000,000		$ 1,000,000		
TEXAS					
UTAH					
VERMONT					
VIRGINIA	$ 1,100,000	$ 1,100,000[7]			
WASHINGTON					
WEST VIRGINIA	$ 2,000,000	$ 2,000,000		$2,000,000	
WISCONSIN					
WYOMING					

1 - Preliminary data collected by the Office of Energy Assistance's telephone survey conducted during the week of January 26, 1987. Table prepared the Office Energy Assistance, OCS, FSA on March 16, 1987.

2 - Includes $150,000 of Stripper Well funds used for Administration.

3 - Not yet obligated at time of Survey. If not obligated, will delete Cooling program.

4 - 13% will be used for Energy Conservation.

5 - To be used for Crisis program.

6 - $168,143 of total Exxon funds dispersed to eligible Indian tribes.

7 - Heat and crisis program.

LOW INCOME ENERGY TECHNICAL ASSISTANCE

Question. What are your plans for the $500,000 authorized for technical assistance to the States?

Answer. Plans have been tentatively initiated to fund projects that will:

- Develop a model State LIHEAP Plan format;
- Sponsor a national low-income home energy assistance conference to focus on ways to improve LIHEAP and open avenues for better coordination among energy assistance activities;
- Develop a manual for States to use on how to more effectively target energy assistance activities; and
- Provide assistance to States in designing and implementing effective energy conservation education programs.

After these projects have been funded, any remaining balance of the $500,000 technical assistance set-aside will be distributed to the States for energy assistance.

AFDC CASELOAD

Question. The FY 1988 budget proposes six statutory changes in the AFDC program which the Administration estimates would result in $322 million in Federal AFDC savings in FY 1988.

How would these proposed changes affect AFDC families?

Answer. We estimate that, as a result of the Administration's FY 1988 legislative proposals, about 14,000 families will be diverted from AFDC, mainly because the parent will find regular employment through participation in the proposed job search and work activities. In addition, 10,000 more families will no longer be eligible, about 180,000 families will receive reduced benefits, and about 17,000 families will receive increased benefits. The effects of the individual proposals are summarized in the following table:

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FAMILIES AFFECTED

Legislative Proposal	Increase	Decrease	Ineligible	Diverted from the Program
(1) GROW initiative. Require all employable individual to participate in job search and work related activities.....	N/A	8,000	N/A	14,000
(2) Remove employable caretaker when youngest child is 16.....	17,000	89,000	---	N/A
(3) Limit definition of essential person...	---	83,000	---	N/A
(4) Prohibit assistance to minor mothers not living with their parents.	---	---	10,000	N/A
(5) Reduce Federal match for with high administrative costs and lower Federal match for systems development....	N/A	N/A	N/A	N/A
(6) Require prospective collection of AFDC fiscal sanctions.....	N/A	N/A	N/A	N/A

Question. How many families would lose AFDC eligibility?

Answer. Please see the response above.

Question. How many families would receive reduced or increased AFDC benefits?

Answer. Please see the above answer.

Question. How many families would obtain a job or be deterred from seeking AFDC?

(Background: The proposed AFDC changes would:

(1) Mandate States to require able-bodied adult recipients to participate in work-related activities chosen by the State and require teenage parents (aged 16 to 18) and recipient children lacking a high school diploma to continue in school or return to school ($8 million cost);

(2) End benefits for employable AFDC parents when their youngest child reaches age 16 ($60 million savings);

(3) Define essential persons as those needed in the home to care for a child or incapacitated adult ($46 million savings);

(4) Prohibit AFDC payments to unmarried minor parents who do not live with their parents ($20 million savings);

(5) Reduce Federal matching funds for States with high per recipient administrative costs and lower Federal reimbursement for the design and development of AFDC automated systems ($16 million savings); and

(6) Require prospective collection of AFDC fiscal sanctions ($188 million savings).)

Answer. Please see the previous response.

CHILD SUPPORT COLLECTIONS

Question. Federal law requires States to enact laws establishing numerous child support enforcement collection procedures.

Have these procedures proved effective?

Answer. The mandatory enforcement techniques of the 1984 Amendments have varying effective dates depending on the State and its State legislature session. 34 States had until sometime during FY 1986 to enact the necessary legislation and begin using the mandated procedures and 18 States have until sometime this fiscal year (FY 1987). It is too early to determine the impact of the 1984 Amendments toward improving program performance.

While there was some increase in collections for FY 1986, we can not say for sure that that increase is attributable to the mandatory procedures, although the law does provide the proven techniques for improving the efficiency and effectiveness of the program. We continue to expect the CSE Amendments to significantly enhance the techniques used for enforcement and collection of child support. Therefore, we have a study planned for FY 1987 and FY 1988 to evaluate these procedures.

We believe revisions in the Federal financing of the program and mandatory use of guidelines will significantly further improve support enforcement.

Question. In particular, what has been the impact on child support collections of mandatory wage withholding for all families (AFDC and non-AFDC) in cases where support payments are delinquent in an amount equal to one month's support?

Answer. Child Support collections from wage withholding, as reported by the States, were $735 million for FY 1986 (23% of collections), the first year for the separate reporting of these collections. Total collections for FY 1986 increased 21%,

compared to FY 1985 collections. Some of this increase we believe is attributable to mandatory wage withholding.

Question. Does the Administration favor automatic wage withholding of child support obligations? That is , should employers be required to withhold child support obligations from wages in AFDC cases, without regard to delinquency?

(Background: The Child Support Enforcement Amendments of 1984 (P.L. 98-378) requires, beginning in FY 1986, all States to have laws in effect that establish the following child support enforcement procedures.

(1) Mandatory wage withholding for all child support enforcement families if support payments are delinquent in an amount equal to one month's support;

(2) Imposing liens against real and personal property for amounts of overdue support;

(3) Withholding of State tax refunds payable to a parent of a child receiving child support enforcement services, if the parent is delinquent in support payments; and

(4) Requiring individuals who have demonstrated a pattern of delinquent payments to post a bond, or give some other guarantee to secure payment of overdue support.)

Answer. Currently, as a result of the Child Support Enforcement Amendments of 1984, State must initiate wage withholding in any child support case in which overdue support equals the amount payable for one month. This means that withholding must be initiated when one month's support obligation is one day late. Wage withholding may be initiated earlier at State option or at the request of the absent parent. Therefore, current Federal law allows immediate wage withholding. To date, thirty-four (34) State have certified that they are using wage withholding in child support cases. Only three (3) States currently use, or will soon, use immediate wage withholding. Several others are considering legislation to mandate immediate wage withholding.

We recognize the potential benefits and problems associated with immediate wage withholding. On the one hand, it ensures regular payment of child support obligations when the responsible individual is employed and it can be seen as destigmatizing the process of wage withholding because every individual who owes child support is subject to it. On the other hand, it places an additional burden on employers and possibly interferes with voluntary parental compliance without government intervention.

Because our current wage withholding requirement is so new, we believe it would be prudent to measure its impact before endorsing a shift to immediate wage withholding.

ESTABLISHMENT OF PATERNITY

Question. In FY 1986, there were 244,864 cases in which paternity was established.

Why is paternity established in so few cases?

Answer. This number is about 1/3 of the out-of-wedlock births for 1986. State CSE programs have varied significantly in their performance due to the administrative structure of the program (e.g. county vs. State operated), the degree of automation of the program, implementation of cost effective establishment and enforcement techniques, the priority States have given CSE in terms of resources allocation, and the attitude of key "players in the process", i.e., human service agency administrators, judges, prosecuting attorneys, clerks of the court, etc. These factors account primarily for the variations among the States in their performance. The impact of these factors is also reflected in the paternity establishment statistic.

Question. Are the costs associated with paternity establishment high?

Answer. The average cost reported to HHS in FY 1986 was $454.59. However, early establishment of paternity can lead to regular payment of child support plus other benefits of paternity establishment.

A Center for Health and Social Services Research study "Costs and Benefits of Paternity Establishment" issued in February 1985 showed that even in higher cost States the overall positive net benefits from paternity cases at 36 months, with benefit/cost ratios continuing to increase at that point, suggests that paternity cases can, in fact, contribute positively to overall child support effectiveness. Another finding suggested that increased costs associated with establishing more paternities is more than offset by marginal increases in collections. In addition, while case characteristics affect establishment success, paternity cases may pay as well as other cases.

Question. What are the medical costs relative to the litigation costs?

(Background: In FY 1986, there were 9.7 million child support enforcement cases, of which 7.2 million were AFDC cases. Roughly 50 percent of the AFDC caseload is comprised of families in which the father is not married to the mother. Paternity, generally, must be established in all such cases in order for the mother to be awarded child support.)

Answer. As mentioned above for FY 1986, the States reported $454.59 as the average cost per paternity established.

Blood test costs and legal representation costs vary depending on the jurisdiction. Blood testing costs varying from $200 to $400 are routine for the standard red blood cell, anti-serum and Human Leukocyte Antigen (HLA) tests. However, not every paternity

establishment case requires blood testing, voluntary acknowledgement is the method by which paternity is most frequently established. Anywhere from 73 percent to 98 percent of the paternity cases were resolved in this manner, according to the Center for Health and Social Services Research Study.

INTERSTATE GRANTS

Question. The Child Support Enforcement Amendments of 1984 (P.L. 98-378) provide funds for special project grants to promote improvement in interstate enforcement of child support obligations.

What is the status of the interstate collection of child support demonstration program?

Answer. For FY 1988, we are not requesting further funding for this activity. We do not believe that further funding of Interstate Child Support Enforcement demonstrations is necessary to maintain an interstate enforcement emphasis. This program was entered into for demonstrating new innovative approaches to processing interstate cases, and we believe knowledge gained from current demonstrations, when put to use throughout the country, will greatly improve processing of interstate cases.

Question. How many States are participating or have participated in the program?

Answer. Almost $34 million will have been made available and at least 41 States will have participated in an interstate demonstration before the end of this fiscal year. The projects, which involve regional and national efforts as well as State pilots, will examine how better to coordinate information and activities between States; and what processing and organization changes are needed for States to improve enforcement of interstate cases. Some specific areas of study include: improved case tracking and monitoring; information clearinghouses; interstate reciprocity agreements for blood testing and wage withholding; and teleconferencing.

Question. Were the demonstrations successful? What was learned?

(Background: P.L. 98-378 authorizes the Secretary of the Department of Health and Human Services to make demonstration grants to States which propose to undertake new or innovative methods of child support collection in interstate cases. The authorization levels are $7 million in FY 1985, $12 million in FY 1986, and $15 million in FY 1987 and years thereafter.)

Answer. Automated case tracking and case management technology already developed from these grants is being transferred to other States to facilitate standardization and speed in interstate child support cases. Information obtained is also being channeled into perfecting a national clearinghouse system for child support enforcement.

Various management improvements will be highlighted in some of the grant projects, such as more effective use of private sector resources, more effective services of process, effective use of child support guidelines and more effective establishment of paternity.

The States' need for standardization and regulatory guidance was recognized as the grants have progressed. Thus, in part, a Notice of Proposed Rulemaking (NPRM) on interstate child support enforcement was published in the Federal Register on December 2, 1986. We are currently reviewing the public comments received and are preparing the final rule which should be published in the Federal Register this spring.

In response to the need for more uniformity and timely processing of interstate actions, OCSE has facilitated the development of standardized forms. OCSE developed an Interstate Transmittal form for use in requesting interstate actions outside the URESA process. A separate package of forms has been developed for requesting URESA actions. The URSEA Action Request form serves as a transmittal and is in use now. The following additional URESA forms are ready for printing: Uniform Support Petition, Paternity Affidavit, General Testimony for URESA, Judges Certificate and Order, Order and Judgment.

Question. During the period March 1, 1986 through September 30, 1986, the Federal matching rate for child support enforcement costs was reduced from 70 percent to 66.65 percent.

What effect did the reduction in Federal matching funds for the Administration of the child support enforcement program have on State child support enforcement activities?

(Background: The Balanced Budget and Emergency Deficit Control Act of 1985 (P.L. 99-177) reduced the FY 1986 Federal match for child support enforcement administration from 70 percent to 66.65 percent and the computer match from 90 percent to 85.69 percent. These reductions applied only to FY 1986 and went into effect on March 1, 1986.)

Answer. Based on FY 1986 data reported by the States, there was no apparent reduction in States' efforts in child support enforcement due to a reduction in the Federal matching of administrative costs required under Gramm-Rudman-Hollings. Expenditures for FY 1986 actually increased at a higher rate in comparison to the prior year increase. There was an 18 percent increase in full time equivalent staff (FTEs), as reported by the States for FY 1986, compared to FY 1985.

EMERGENCY ASSISTANCE

Question. In FY 1984, total expenditures on the emergency assistance program amounted to $152.8 million. This sum decreased to $151.1 million in FY 1986. Average emergency assistance payments per family fell from $420.24 in FY 1984 to $377.00 in FY 1986.

Why aren't States using their emergency assistance programs more?

Answer. Emergency Assistance, EA, is an optional program, which States may add to their AFDC program if they wish. In FY 1986, 27 States elected not to offer this program. Of those States offering the program, 11 had decreases in their costs between FY 1984 and 1986 while the remaining 12 had increases. Because of the limited nature of benefits provided by the EA program, some problems, such as long term homeless, are best addressed by other programs.

As publicity concerning the needs of homeless individuals and families has increased, there has also been an increase in the involvement of other public and private non-profit agencies in meeting the emergency needs of families. Other agencies and organizations are providing information and referral services as well as actual assistance such as food and shelter to such families.

States take advantage of the optional nature of the EA program to set their own priorities and to determine which programs will best serve State needs. Some States have found other, more effective means of providing similar services or they have determined that other State needs require more urgent attention.

Question. The general perception is that the number of families needing temporary assistance has increased. Is this a misconception, as the emergency assistance data suggest, or are States making more use of other ways to help such families?

(Background: The emergency assistance program provides financial assistance and social services to needy families with children under age 21 to meet emergency needs, for no more than 30 days per calendar year. Assistance may be in the form of cash or such items as food, clothing, rent, utilities, or medical care provided or paid for by the agency administering the program. The emergency assistance program currently is operating in about half of the States and jurisdictions. The Federal government shares 50 percent of emergency assistance costs with the States and jurisdictions that offer this program.

Emergency Assistance Expenditures
(in millions)

Fiscal Year	Total	Federal	Number of Families	Average Payment Per Family
1981	$114.9	$57.5	52,000	$184.13
1982	101.8	50.9	30,200	280.91
1983	110.0	55.0	29,400	311.79
1984	152.8	76.4	30,300	420.24
1985	151.8	75.9	32,200	392.86
1986	151.1	75.6	33,400	377.00

Answer. The AFDC program keeps records by cases rather than by families. These records shown significant changes between FY 1984 and 1986. Changes varied on a State-by-State and on a regional basis. New York, Oregon, Wisconsin and Wyoming showed marked increases in their EA case expenditures for FY 1986. Eight other States showed only minor fluctuations in their expenditures.

Because of increased publicity about families needing assistance, particularly emergency shelter, assistance has become available through other public and private non-profit agencies, reducing their need to turn to Emergency Assistance Programs.

WELFARE EXPERIMENTATION PROPOSAL

Question. The President's 1986 directive to the White House Domestic Policy Council to study the welfare system resulted in a number of recommendations. The White House proposal would give States broad new authority to waive Federal laws defining eligibility for benefits under health, education, welfare, housing and veteran's programs.

How are the FY 1988 AFDC budget proposals affected by this new experimentation proposal, which would allow States to consolidate numerous welfare programs into locally developed systems of cash grants, vouchers, and work requirements?

Answer. The AFDC budget proposals are not directly affected by this new experimental proposal. Except in areas covered by experimental projects, States would be required to implement the budget proposals. In areas covered by an experimental project, the budget provisions might be waived, upon request of the State and approval of the Chairman of the Low-Income Opportunity Board.

Question. What is the status of the FY 1988 AFDC budget proposals?

Answer. One of the FY 1988 AFDC budget proposals--the GROW program--was included in the President's package of competitive legislation and incorporated into the Trade, Employment, and Productivity Act of 1987. The legislation was introduced by Senator Dole and Congressman Michel in mid-February.

The remaining AFDC 1988 budget proposals are to be submitted as a separate package of legislation. The Department has not finished drafting that legislation. It will be forwarded to Congress as soon as it is available.

Question. What is the status of the welfare experimentation proposal?

(Background: After a one-year study, a White House Task Force headed by Domestic Policy Advisor Charles Hobbs recommended that the President seek legislation that would authorize States to undertake Demonstration projects intended to get welfare recipients into productive work. The task force recommended that local projects be allowed to combine programs (99 were listed in the draft legislation) to provide, if desired, a single case payment in place of several cash and service benefits; to set

their own benefit levels, to require various types of work; and in general to set aside Federal program rules.)

Answer. The welfare experimentation legislation was sent to Congress in February and was introduced as S. 610 by Senators Simpson, Dole, Moynihan, Roth, Wallop, Armstrong, and Gramm on February 26. The legislation is known as the Low-Income Opportunity Improvement Act.

GROW

Question. What are the significant changes from WIN in terms of client participation, State performance standards, and degree of Federal fiscal commitment?

Answer. The GROW proposal differs from the WIN program in a number of ways:

- GROW focuses on those empirically shown most likely to be dependent on welfare for several years. Many welfare recipients who are not required to participate under the current WIN program would no longer be exempt from education, training and work requirements. This includes school recipient children age 16 and over, persons working less than 30 hours per week, young parents under the age of 18, parents and relatives responsible for the care of children under 6 years of age, except for the first 6 months after birth, persons too remote, or another adult in the household where one adult already is subject to participation requirements.

- In the first year 20 percent of the employable recipients will be required to stay in high school, participate in employment search, other work activities, short term training or educational activities. The participation rates will increase 10 percentage points each year reaching 60 percent in the fifth year.

- In 1988, we will determine the percent of young parents under age 18 with less than a high school education who are participating in educational activities. We will require States to make steady progress in increasing this percentage in order to reach a participation level of 80 percent by 1992.

- Beginning in 1992, 90 percent of recipient children age 16 and over with less than a high school education will be required to be enrolled in school. Again, States will be required to make steady progress from their baseline participation rates in 1988.

- The Federal government will provide open-ended funding at a 50 percent match for employment activities and support services.

Question. How does it complement the JTPA program?

Answer. The GROW proposal complements JTPA in a number of ways. It provides supportive services for AFDC recipients receiving training through JTPA. It imposes educational requirements on AFDC youth and teen parents which will enable them to earn more from JTPA participation, and requires a broad range of work activities, such as job search and work experiences, for adults which complement the skills training available through the $1.8 billion JTPA block grant. GROW also contains a provision to improve the exchange of information between JTPA and welfare agencies. Finally, GROW complements the AFDC youth initiatives proposed by the Department of Labor. The DOL proposal increases financing for title II-B of JTPA and gives States and local areas the flexibility to develop year-round remedial training programs for youth in AFDC families as well as continue the subsidized summer jobs program which provides work experience for low-income youth. This proposal and GROW are both designed to provide better early intervention in preventing long term welfare dependency.

COMMUNITY FOOD AND NUTRITION PROGRAM

Question. Congress provided $2.5 million for the Community Food and Nutrition program in Fiscal 87, which is the program's first appropriation since being authorized.

What is the status of your efforts to implement this program?

Answer. The Office of Community Services is actively working on implementing the program. The following have been accomplished:

-- An OCS Task Force has developed the Program's competitive Discretionary announcement which has cleared the Department and is awaiting OMB final clearance;

-- Procedures for funding the projects are in place; and

-- Awards to States totalling $1.5 million were signed and mailed 3/13/87 to all States with approved plans.

Question. Why are you requesting no money in Fiscal 1988 to continue the Community Food and Nutrition program?

Answer. We are not requesting additional funds for the Community Food and Nutrition Program in FY 1988 because we believe that similar services can be provided under other Community Services Block Grant programs.

COMMUNITY SERVICES DISCRETIONARY ACTIVITIES

Question. How are you proposing to allocate among specific activities the $27.9 million requested for discretionary community service activities?

Answer. The FY 88 funding allocations for each of the five specific activities which make up the Discretionary Grants Program— community development, rural housing, National Youth Sports Program, Migrant Farmworkers, and Demonstration

Partnerships-- will be allocated in proportion to their FY 1987 allocations.

WIN

Question. Congress reduced appropriations for the Work Incentive Program (WIN) to $103 million in fiscal 1987, compared to $203 million in fiscal 1986 - but specified the money was to be used in the first 9 months in anticipation of a new work and welfare program to replace WIN.

If Congress does not enact a successor to the WIN program by July, when the current WIN appropriation is due to expire, will you request a supplemental appropriation for WIN?

Answer. No. For FY 1987 Congress appropriated resources for WIN to be obligated within the first nine months of the fiscal year. Once obligated those resources may be expended to cover operations during the last quarter of FY 1987. Projections based on our current estimates are that funds already obligated will still be unspent by the States as of June 30, 1987. Our records show that $21 million were unobligated by the State's at the end of fiscal year 1986 and an additional $5 million of new FY 1987 funds were unobligated as of the end of the first quarter of FY 1987. Analysis of cash draw-downs from the States' letters-of-credit administered by the Department of Treasury indicates that of $62 million WIN Demonstration funds already awarded to the States, including $21 million FY 86 carry over and $41 million of new 1st and 2nd Quarter FY 87 funds, only $28 million has been expended. This means that $34 million of unexpended funds is currently available in addition to another $32 million to be awarded during the third quarter of FY 1987. In addition, States may coordinate services with other programs providing job search and training for AFDC recipients such as the $1.8 billion Job Training Partnership Act block grant. Therefore, it appears that sufficient funds will already be available in the States on June 30 making any supplemental funds unnecessary at this time.

FSA STAFFING

Question. Your budget proposes to eliminate 63 full-time equivalent positions in fiscal 1988.

Specifically, where will these staff cuts be taken?

Answer. The FTE savings as a result of consolidating overhead functions and other efficiences will be spread across the various program and support components of the Family Support Administration.

Question. Provide for the record a table comparing actual staffing levels in fiscal 1986, enacted fiscal 1987, and requested fiscal 1988 for each of the main component programs (WIN, Low-Income Home Energy, Child Support Enforcement, Refugee Resettlement, Community Services, AFDC, and others).

Answer. Please see the following chart for the requested information.

FSA Staffing*

	FY-86 1/		FY-87 2/	FY-88 2/
	Pre Reorg	Post Reorg		
Administrator Communications Policy	0	28	28	27
Financial Mgt.	0	66	66	64
Mgt & Info. Systems	0	107	107	102
Regions	487	487	465	445
Immigration	0	0	10	10
OFA	297	179	146 3/	140
OCSE	220	163	152	146
ORR	54	42	39	37
OCS	57	45	62 3/	59
WIN	20	18	18	0
TOTAL	1,135	1,135	1,093	1,030

* Data are stratified each fiscal year by FTE ceiling for comparability.

1/ Data were extracted from official DHHS submissions to OPM on the 113G-A reports.

2/ Included in Financial Management are 8 FTEs transferred to PHS for accounting functions in FY 1987 and FY 1988 and transferred to the Office of the HHS Secretary for personnel and administrative service functions are 8 FTES in FY 1987 and 7 FTEs in FY 1988.

3/ Reflects transfer of 22 FTE from OFA to OCS which represents transfer of Low-Income Home Energy Assistance program.

REFUGEE CASH AND MEDICAL ASSISTANCE POLICY

Question. The Immigration and Nationality Act authorizes 100 percent Federal reimbursement of cash and medical assistance for refugees during the first 36 months after their entry. In 1986, you reduced the period Federal reimbursement was provided from 36 to 31 months.

Do you believe the further reduction to 24 months can be accomplished by regulation alone, or will legislation be required?

Answer. We expect the adjustment to 24 months to be confirmed through the budget and appropriations process.

Question. In 1986, you reduced the period Federal reimbursement was provided to cover State refugee costs from 36 to 31 months.

Do you have any evidence that the decrease in Federal assistance discouraged refugee welfare dependency?

Answer. The data on cash assistance show a decrease in the caseload which was reported to the Office of Refugee Resettlement, ORR. However, the information available does not enable us to know the extent to which the reduction reflects less utilization of AFDC versus the shorter period for which ORR reimbursement could be claimed.

It should be noted that the reduction from 36 to 31 months resulting from Gramm-Rudman-Hollings went into effect on March 1, 1986, and thus was operational only during the last seven months of FY 1986. We do not believe this provided a long enough period for most States to initiate new efforts to reduce refugee dependency in their AFDC programs.

In terms of the caseload reported to ORR, 31 States showed decreases between September 30, 1985, and September 30, 1986. The number of recipients nationally decreased from 111,046 to 104,390.

ADMINISTRATIVE COST REDUCTION PROPOSAL

Question. According to the budget request, a saving of $14 million is anticipated in fiscal 1988 by capping reimbursement of State refugee administrative costs for cash and medical assistance.

What is the current basis for reimbursement of State administrative costs?

Answer. Under current regulations, States may claim "reasonable and necessary identifiable administrative costs of providing assistance and services", 45 CFR 400.207.

Question. Please explain the reason for the proposed change.

Answer. In recent years, State administrative costs have been increasing as a percentage of the actual costs of cash and medical assistance. Among the States, these administrative costs in FY 1985 ranged from 7% of assistance to 4 States with well over 100%. In many States, the percentage cost of administering the refugee cash and medical assistance program significantly exceeds the State's percentage cost of administering its AFDC program, even though both programs are administered by the same State agency. We believe that these higher costs are unwarranted and fail to meet a standard of reasonableness.

Question. Have the States expressed any objections to it?

Answer. ORR has not received objections to the proposed change in the rules regarding administrative costs.

Question. Doesn't this proposal require authorizing legislation?

Answer. No, it can be effected by regulation.

AFDC FISCAL QC DISALLOWANCES

Question. Once again the Administration's budget assumes collection of fiscal sanctions for erroneous AFDC payments. The FY 1988 budget assumes collection of $349 million in AFDC fiscal sanctions. This $349 million figure represents the estimated sanction amounts for FY 1981 ($69 million), FY 1982 ($96 million), and FY 1983 ($184 million).

Is this a realistic assumption given that the Congressionally mandated study on the AFDC Quality Control system is not due until July 1988?

Answer. We would like to clarify for the record that the study report is due September 1987. The moratorium on collections ends in July 1988. This provides more than ample opportunity for the Secretary to evaluate the study results.

In the absence of recommendations from these studies, we do not see any basis for changing our current estimates.

Question. Does the Department of Health and Human Services plan to consider recommendations from the studies?

(Background: In April 1986, as part of the Consolidated Omnibus Budget Reconciliation Act of 1985 (P.L. 99-272), a 2-year moratorium was imposed on the collection of AFDC fiscal sanctions (until July 1988). The Act requires the Department of Health and Human Services to conduct a study of the AFDC and Medicaid quality control systems. The Department also is required to contract with the National Academy of Sciences to conduct an independent study.)

Answer. The Department fully intends to seriously consider all recommendations from the studies.

LOW INCOME ENERGY

Question. What specific calculations led to the proposal for only $1.24 billion in LIHEAP funds in FY 1988? What energy price assumptions were used?

Answer. The real issue is the total resources available to States for energy assistance, regardless of source. The combination of the President's LIHEAP request and available oil overcharge funds is significantly larger than previous Federal appropriations.

Question. What proportion of oil price overcharge recoupments are you assuming that States will use to make up the reduction in Federal LIHEAP appropriations? In short, how much will States have to put up in order to maintain, much less increase, the degree to which LIHEAP is serving the eligible population?

(Background: The FY 1988 appropriations request for the LIHEAP asks for a substantially reduced appropriation: $1.25 billion as

opposed to $1.825 billion in FY 1987, a 32 percent reduction. The Administration justifies this by pointing to lower energy prices and the availability of other funds to finance LIHEAP activities, primarily oil price overcharge recoupments. This is the same rationale the Congress used in reducing the FY 1987 appropriation to $1.875 billion.)

Answer. States would need to utilize an average of 19% of their oil overcharge recoupment to make up the reduction in Federal LIHEAP appropriations in FY 1988.

IMMIGRATION ASSISTANCE

Question. Under the new immigration law your Department has responsibility for the State reimbursement program. How will this program be set up to distribute the grants, and when do you expect to make monies available to the States?

Answer. The State Legalization Impact Assistance Grant -SLIAG- program will be administered by the Family Support Administration. We expect to make grant funds available to States with approved applications in October 1987.

Question. The Act appropriates $1 billion per year for each of four years under this reimbursement program. The provision also allows for an "off-set" - allowing the Federal government to take their share of the costs off the top of the $1 billion. There is a cap on the first year of $70 million, but no cap in the second, third, or fourth years. According to the CBO, the Federal share of the money will continue to increase, while the costs to the States will also increase. Do your estimates agree with those of CBO? And, if so, should the States really be expected to pick up the costs of this legalization program if the impact grants available in the out years is insufficient?

Answer. The statute requires that the Federal government offset the costs of providing certain Federally funded assistance to certain categories of legalized aliens. While our specific estimates do not agree entirely with CBO's, we agree that the Federal offset will be higher in FYs 1989, 1990 and 1991 than in FY 1988. Thus, the amount of funds going to States will be less in those later years than it will be in FY 1988.

It is much too early to make assumptions about what State and local costs will actually be. We really don't know how many illegal aliens there are in this country, how many are eligible for the legalization program and how many will come forward and apply for legalization. Only when we know how many aliens come forward and we begin to get some hard cost data from States will we be able to assess the costs associated with legalization.

Congress clearly did not intend that SLIAG meet all costs associated with the legalization program. Congress recognized that this is a Federal, State and local responsibility. To assume that the Federal government should pay all costs ignores the fact that the population eligible for legalization generally is made up of people who work and pay taxes. Thus, the assertions that legalization will impose burdens on State and local governments

ignore the real benefits that State and local governments receive from the presence of these workers.

Question. The legalization impact-assistance grant provisions in the Act do not distinguish between services provided for the first time to legalized aliens and services that have been provided in the past to illegal aliens. Can you explain how you are interpreting this section as to who will be eligible for reimbursement and for which services?

Answer. SLIAG funds were intended to cover interim costs related to the passage of the Immigration Reform and Control Act. To the extent that State and local governments were already incurring costs prior to the passage of IRCA and would have continued to have incurred those costs in the absence of IRCA, those costs should not be an appropriate use of SLIAG funds.

In implementing this provision, however, we do not intend to impose any additional requirements beyond those imposed by the statute itself.

REFUGEE SOCIAL SERVICES

Question. The Refugee Assistance Extension Act of 1986 authorized $74.8 million for refugee social services for fiscal 1987 and $77.9 million for fiscal 1988. The budget request includes a decrease from $68.6 million in fiscal 1987 to $45.5 million requested for fiscal 1988.

Please explain this discrepancy in perceived need.

Answer. $68.6 million was made available in FY 1987 under the Continuing Resolution, the same amount as was made available by Continuing Resolution in FY 1986. Previously, prior to Gramm-Rudman-Hollings, $71.7 million was made available by Continuing Resolutions in FY 1985 and FY 1984.

All of these amounts fail to take into consideration the substantial reductions in refugee arrivals which have occurred in recent years. The amounts appropriated were higher than needed based on the numbers of arrivals.

A further reduction in refugee arrivals is projected in FY 1988. The amount requested is based on refugee arrivals during FY 1986, the ceiling for FY 1987, and the projected arrivals in FY 1988.

REFUGEE PLACEMENT POLICY

Question. The Refugee Assistance Reauthorization Act passed in the closing hours of the last Congress outlined a number of criteria for placement of refugees in geographical areas.

What steps have you taken to ensure the implementation of that additional provision to the bill?

(Background: The intent of the new legislation was to prevent placement of large numbers of refugees in areas that are already so heavily impacted that they can't support additional costs.)

Answer. We have in effect a placement policy, initiated in 1982, which reflects the same factors as those set forth in the 1986 Amendments. During the last few years we have also carried out a number of efforts to effect favorable initial resettlement, achieve greater stability in refugee communities in unimpacted areas, and reduce secondary migration. These special efforts have included favorable alternate site projects, a Highland Lao initiative, planned secondary resettlement, and Khmer cluster projects.

Two aspects of refugee placement should be noted: First, the reduced numbers of refugees reaching the U.S. during the last several years have greatly lessened the impacts that were experienced with the very large numbers of arrivals during fiscal years 1980-1982; and, second, the majority of arriving refugees are coming to the U.S. to be reunited with family members who are already here, so that their destinations are usually determined by the location of their relatives.

REFUGEE CURRENT SERVICES

Question. How much would have to be added to your budget request to maintain the status quo on the length of time Federal reimbursement will be available for refugee assistance?

(Background: The Administration proposes limiting cash and medical assistance to the first 24 months after arrival of refugees, compared to the current time period of 31 months.)

Answer. If the length of time the Federal government subsidizes States for refugee assistance is increased to 31 months for categorical assistance and 18 months for non-categorical assistance, approximately $45 million would have to be added to the current budget request amount.

IMMIGRATION ASSISTANCE

Question. According to the FY 88 budget justification, proposed rules governing the State legalization grants will not be published until April. Do you have a more exact date now? The legalization program begins on May 5, 1987, and State and local governments will want to start budgeting for related expenses, even though the State legalization grants will not be available until October 1, 1987.

Answer. The Department expects to issue proposed regulations soon. Prior to that, we will make available to States a summary of our proposals as part of the statutory requirement that we consult with State and local governments in developing these regulations.

In general, SLIAG funds will not be available for costs incurred prior to October 1, 1987.

As a practical matter, although INS will begin taking legalization applications on May 5, 1987, very few people will actually be granted status prior to October 1, 1987. This is because of the time it will take INS to process the applications, verify information and perform other necessary checks.

Question. As the budget justification notes, the law provides that the State legalization funds will be available for obligation until September 30, 1994, although the grant program itself ends with FY 91. How are you interpreting this? Will the full amount available to the States be distributed each year, regardless of need?

Answer. The statute is quite specific that States have until September 30, 1994 to obligate funds appropriated through FY 91. The statute is also clear that, once granted, States may carry over unobligated funds to subsequent fiscal years without restriction (other than the September 30, 1994 cutoff).

Question. Will they be allowed to carry over unused sums for use in subsequent years?

Answer. The statute also is specific that, if a State indicates in its application that it will not use (which we interpret as obligate) its allotment in the current or subsequent fiscal year, any excess must be realloted to other States.

REFUGEE PREVENTIVE HEALTH

Question. The Refugee Assistance Extension Act of 1986 authorized $8.8 million for refugee preventive health for fiscal 1987 and $9.1 million fiscal 1988. The budget request includes a decrease from $8 million in fiscal 1987 to $6.1 million in fiscal 1988.

Please explain this discrepancy in perceived need.

Answer. This change reflects principally the anticipated decrease in refugee arrivals and the carrying out of more of these activities through the Medicaid and refugee medical assistance, RMA, programs.

REFUGEE VOLUNTARY AGENCY PROGRAM

Question. The Congress is on record in legislation enacted in 1985 and 1986 as supporting continued Federal funding of the refugee voluntary agency programs.

What are the Administration's arguments for continuing to attempt to phase out Federal support of this program which it has characterized as successful?

Answer. The matching grant program was initiated at a time when large numbers of Soviet Jewish refugees were reaching the United States and the costs of their resettlement exceeded the capacity of the voluntary sector, which had previously been assisting these refugees entirely through private resources. With

the diminution in this flow of refugees, these efforts can again be fully assumed by the private sector. The change in the matching grant program which we proposed for FY 1988 is a step in this direction.

Question. In response to a question submitted last year by the Senate Appropriations Committee regarding whether more refugees could participate in the voluntary agency program, given its success, HHS/ORR replied: "Although some grantees have indicated a desire to serve more refugees, current budget levels and the ability of agencies to raise the necessary amount of match contribution are limiting factors to expanding the program" (p. 1101). Doesn't this answer conflict with the contention that the Federal matching share could be supplanted by additional support from the private sector?

Answer. We believe that the response which you cite was correct in referring to "some grantees" but was not clearly stated. The information submitted for FY 1987 by the grantee agencies under the matching grant program indicates that some of the agencies propose to provide more funds to serve refugees than they provided under the matching grant program in FY 1986.

Question. Please explain the reference in the FY 88 budget justification to the possibility of "consolidating initial resettlement activities in voluntary agencies...under cooperative agreement with the Department of State".

Are you suggesting an increase in the State Department's initial reception and placement grants to the voluntary agencies in lieu of Office of Refugee Resettlement support for the voluntary agency program?

Answer. This statement refers to our intent to end the matching grant program at the beginning of FY 1989 following the phasedown funding requested for FY 1988. We are suggesting that, beginning in FY 1989, the provision of assistance and services to some refugees can be consolidated entirely under the aegis of the voluntary agencies by the agencies' first providing initial reception and placement activities with the help of State Department funding and by the same agencies' then continuing, without additional Federal funding, to provide services, as necessary, to enable the refugees to become employed. We are not suggesting that the State Department funding be increased, but rather that we move toward a procedure under which some refugees would be served by a combination of State Department funds and private resources instead of moving onto public assistance from which their exit is often difficult to achieve.

Question. Is this reflected in the fiscal 1988 State Department budget request?

Answer. The State Department's FY 1988 budget request projects funding for initial reception and placement at a continuation of the rate of $560 per refugee for a total of $31,360,000.

Question. Have the voluntary agencies been consulted about this possibility and, if so, what has been their reaction?

Answer. No, we have not consulted with the voluntary agencies about the reduction in the matching grant program proposed for FY 1988.

REFUGEE ADMISSIONS

Question. How did you arrive at the estimate of a ceiling of 56,000 on fiscal 1988 refugee admissions? Was this done in consultation with the State Department?

Answer. Yes, as indicated earlier, the estimate is the number that has been used by the Department of State to come up with its budget request for initial reception and placement for FY 1988.

Question. In general, the Administration would appear to be severely constrained by its budget request in January and the subsequent appropriations when determining the ceiling on refugee admissions it recommends in September for the next fiscal year.

In your experience, has this been the case?

Answer. In our annual consultations with the Departments of State and Justice regarding refugee admissions, prior to the President's submittal of proposed admissions for the coming year, this Department has not felt constrained by an existing budget request. We believe the reason has been that in recent years there has been no dramatic change in the world refugee situation, affecting estimated refugee admissions to the U.S., between the time of budget submittal to the Congress and the carrying out of the Congressional consultation process on refugee admissions. If a significant change were to occur, we believe that the consultation process could take it into account, and a budget adjustment could be sought during the year in which the admissions were to occur. If the situation were so urgent that action was required before the next scheduled Congressional consultations on admissions, the existing legislation would permit consultations to be held quickly and budget adjustments could also be sought quickly.

Question. Would you recommend an amendment to the Immigration and Nationality Act to require coordination of the development of the budget and the Congressional consultation process regarding the ceiling on refugee admissions for a given fiscal year?

Answer. We believe that the present process has worked well and therefore do not recommend a statutory change. We do not feel that the budget process could be delayed to conform to the present timing of the Congressional consultation process on admissions, and if the admissions consultation process were to occur in the same time frame as the budget process, then it would not be able to reflect changes in the refugee picture that could occur during the several months before the start of the fiscal year in question. Since the existing legislation is well designed to

permit adjustments in response to emergent refugee situations, we do not believe a change is necessary.

Questions Submitted by Senator Quentin N. Burdick

COMMUNITY ECONOMIC DEVELOPMENT FUNDING

Question. Please tell the Subcommittee how many applications were received for community development funding.

Answer. The Office of Community Services received 168 applications for funding in FY 1986 under the Urban and Rural Economic Development program priority area.

Question. How many of the applications were funded?

Answer. Of the 168 applications received, fifty six were funded.

Question. Of those not funded, how many, in your opinion, were qualified to receive funding if more money had been available?

Answer. The final determination regarding funding of applicants was made by the Director, Office of Community Services, in Fiscal Years 1982-1986. These determinations were made based on a review of each application starting with the most highly qualified, according to a rank order established by scores submitted by field reviewers, and proceeding in descending rank order. These reviews concluded at the point where all available funds had been obligated. Those applications which were ranked below this cutoff point were not reviewed. Therefore, OCS is not able to determine if any of those not funded would have been qualified to receive funds if more money had been available or if any of those funded were poor uses of funds.

Question. How much additional funding would have been necessary to fund these unsuccessful yet qualified applications?

Answer. In Fiscal Year 1986 applications which fell below the cut-off point for funding contained requests for funding totalling $32,141,882. Due to the process described above, it is not possible to determine those which would have been qualified and, therefore, how much additional funding would have been necessary to fund them.

Question. Please provide the Subcommittee with an estimate of the number of jobs created and the number of dollars leveraged through the CED program for FY 82-86. Can you also tell the Subcommittee how this record compares with other, similar federal programs?

Answer. We can tell how many people are working in enterprises subsidized by the CED program, but we cannot say how many jobs were created due to the program. We do not know what

the non-Federal money would have been used for were it not for the grant; the money might have created other jobs, or jobs elsewhere. For example, one grantee used CED money to help move a business from Los Angeles to a town on the Mexican border where expansion was cheaper. We can tell you how many people work there, but not whether the grantee might have found private funds for the same purpose. Los Angeles lost jobs. Perhaps the business would have expanded in Los Angeles were it not for the grant, but with a smaller profit margin.

So all we can tell you is the number of people working in enterprises subsidized by CED. The number of people work in subsidized enterprises were: FY 1982 - 4,395; FY 1983 - 2,975; FY 1984 - 3,572; FY 1985 - 3,705; FY 1986 - 5,659.

We have no data available which would permit us to compare this record with those of other, similar Federal programs.

Question. Please provide the Subcommittee with the rationale for grants for "emerging" CDC program.

Answer. OCS recognizes that many communities have needs which are not being met in the area of economic development and which impact on the low income citizens of these communities. Some of these communities are served by fledgling non-profit community development corporations which do not have the staff or other resources to develop projects to address the needs in their communities. This lack of resources can affect their ability to compete for funds such as those provided by OCS under its Urban and Rural Community Economic Development Operational Grants program. OCS believes that the communities served by fledgling CDCs should have an equal opportunity to access existing resources. A way of achieving this goal is to strengthen these CDCs. A well-established CDC would bring technical expertise and new resources to the community.

COMMUNITY ECONOMIC DEVELOPMENT PROJECTS

Question. Please provide the Subcommittee with a profile of five of your most successful CED projects and suggest ways in which these projects can be duplicated in other States.

Answer. The following are 5 examples of successful CED projects.

Example 1:

Summary: The grantee, the California State Office of Economic Opportunity (Cal SEOO) through a subgrantee, the Heber Public Utility District, identified a business in Los Angeles which was looking for a new location in which to expand its pipe fittings and accessories plant. The plant owners were convinced to relocate to Heber on the Mexican border where there was land available at reasonable cost and where there was an available labor pool of unemployed people. (The unemployment rate is estimated conservatively at 40% which is the highest in the State.)

CAL SEOO provided $750,000 in OCS grant funds to the Heber Public Utility District which negotiated a partnership agreement whereby Heber received a 40% equity position in the plant for the OCS funds which it invested. The partners then purchased land and constructed a plant in Heber.

Benefits to Low-Income: The business recruited and trained 102 low-income people by the end of the grant period, 57 of whom received permanent employment in the plant and 45 who obtained employment in other businesses. In total the project has generated 171 direct and indirect permanent jobs. The project generates over $200,000 annually in the local purchases of goods and services and has an annual payroll approaching $1 million.

Example 2:

Summary: As part of its long term commitment to forest products development, the Mountain Association for Community Economic Development, Berea, Kentucky, established its sixth venture in its investment program aimed at fostering expanded higher value-added markets in eastern Kentucky. MACED entered into a joint venture with a major hardwood industry firm to increase the market for oak lumber produced by the area's small sawmills and to provide business opportunities for local small sawmill owners to become independent suppliers of grade hardwood. The company expanded the market access of eastern Kentucky's hardwood industry by providing collection, grading, kiln drying, trimming, packaging marketing, financing, and market monitoring services to the area's sawmills.

Benefits to Low-Income: As a direct result of this project 85 jobs have been created for low-income residents; 10 small mill owners have become independent suppliers of the hardwood being produced; and training was provided to workers in areas of modern equipment handling.

Example 3:

Summary: OCS provided a grant to the Fond Du Lac Reservation Business Committee, Cloquet, Minnesota, to acquire and rehabilitate/remodel a facility in Duluth for the purpose of expanding operations of an on-going Bingo venture. The former Sears Roebuck building was acquired and renovated and the organization is open and operating as of September 1986. The venture, based upon present income, is projected to gross $12 million in its initial year of operation.

Benefits to Low Income: One hundred and fifteen jobs will be created and filled. Profits will be applied to adminstration, operations, support services, and other tribal activities. The facility has become an anchor facility and has stimulated additional economic development in its immediate environs.

Example 4:

Summary: A grant was made to the Madame Walker Urban Life Center in downtown Indianapolis, Indiana, to complete the development and renovation of a 48,000 square foot historical building (the Madame Walker Building) as incubator space and to provide lease write downs for minority businesses.

The renovations of the space were completed and the incubator space created can house thirteen businesses.

Benefits to Low Income: 91 permanent jobs were created in the first year along with 171 construction jobs; and thirteen minority businesses have affordable leases, nine of which have been written down as a result of the grant.

Example 5:

Summary: The Economic Resource Corporation of Lynwood, California, constructed a 55,207 sq. foot u-shaped commercial building as part of a business/industrial park expansion. Upon completion the building was occupied by three tenants - a wall-board manufacturer, a gaming hardware/software firm, and an upholstered funiture manufacturer. The project was funded with OCS funds, bank loans, and funds provided by the grantee. Total project cost was $1,523,692 and the OCS grant was $160,000.

Benefits to Low Income: The project created 115 permanent jobs and maintained 29 jobs. It is estimated that 25-30 job opportunities will be created annually from employee turnover. The project also created a number of temporary construction jobs. A majority of the temporary and permanent jobs were filled by low-income people.

Regarding replication of these projects it should be noted that although these projects cannot be replicated in the whole since circumstances differ from community to community, e.g. identified needs, resources available, skills available, many of the concepts could be used in other States. Dissemination of information on OCS projects would help organizations in other States to focus on their own community economic development needs and the applicability of such projects to their communities. This information will be made available by OCS to the general public at the end of the Fiscal Year when it publishes a catalog, describing all of the projects assisted under the Urban and Rural Community Economic Development program.

Question. Has OCS explored working with other Federal agencies with a similar mandate - HUD, EDA, Labor -- to increase and enhance funding for community economic development?

Answer. Due to its unique legislative mandate that its activities focus only on the low income versus broader mandates given to HUD, EDA, Labor, etc., OCS has not worked with other federal agencies in the area of community economic development. However, OCS administratively requires that grantees provide matching funds in the amounts of one private sector dollar or two public sector dollars to each dollar of OCS discretionary funds received. As a result many grantees receiving funds under OCS' Urban and Rural Community Economic Development program work closely with, and mobilize funds from, these agencies thereby increasing and enhancing funding for the projects at the local level.

Questions Submitted by Senator Lowell P. Weicker, Jr.

COMMUNITY SERVICES BLOCK GRANT

Question: Mr. Stanton, the budget request for the Community Services Block Grant program contains good news and bad news this year. The good news is you haven't proposed eliminating the program in 1988. The bad news is you do propose to phase it out by 1991.

Why are you proposing to phase this program out when Congress has rejected proposals to eliminate it in the past?

Answer: We are proposing to phase-out this program because we believe it is duplicative of other Federal social service programs and activities. We do not believe we can afford to continue such duplication in times of increasing budget deficits. The Administration is proposing this 4-year phase-out to allow States and local grantees adequate time to identify funding from other Federal, State, local and private sources. Further, other programs, particularly the Social Services Block grant, already provide essentially similar services and States can use these funds to provide those community services and activities which are of the highest priority and deemed most effective.

LOW INCOME ENERGY

Questions. Mr. Stanton, last year Congress cut the Low Income Home Energy Assistance Program with the understanding that States had received oil overcharge funds which could be used to supplement the LIHEAP appropriation. This year, you propose cutting last year's appropriation by an additional $585 million dollars, citing the availability of the oil overcharge funds as a resource for States to help meet the energy needs of low income households.

What is the status of these oil overcharge funds? Have they all been distributed?

Answer. We do not have complete information on the oil overcharge funds amounts that have been distributed. The Office of Energy Assistance conducted its annual winter survey with the States in January 1987. That survey indicated that almost $3.1 billion have been distributed, of which 24 States had expended $169.7 million through the LIHEAP program for FY 1987 to that point in time.

Question. Are States using these funds to help meet home heating costs?

Answer. Our winter phone survey, conducted in January 1987, indicated that 24 States had expended $169.7 million through the LIHEAP program for FY 1987 to that point in time. Of the total funds, the States reported that $72.9 million was spent on fuel assistance, $49.5 million for weatherization, $6.5 million for

combined (fuel and weatherization) uses and $39.7 million for unspecified purposes.

PREGNANCY AND HOMELESS INITIATIVES

Question. Mr. Stanton, in your prepared statement, you indicated that Secretary Bowen has given the Family Support Administration lead agency responsibility for the homeless and teenage pregnancy initiatives.

What initiatives are you planning in these areas and how much have you included in your budget request for these initiatives?

Answer. A number of activities are underway or soon to be underway in HHS to aid the homeless, including the following:

— In 1988 HHS will establish a Homeless Clearinghouse using $250,000 of discretionary funds through the Office of Community Services to disseminate information resources and model programs to aid the homeless.

-- The homeless have access to nearly 600 community health centers for which HHS plans to spend $400 million in 1988.

-- Through the Alcohol, Drug Abuse, and Mental Health Administration's Community Support Program, communities will have access to $20 million, of which $7 million is for the chronically mentally ill, in 1988 — $5 million more than in 1987 -- to plan and coordinate the best possible services for the chronically mentally ill, a major problem among the homeless.

-- HHS funds more than 275 Runaway and Homeless Youth shelters where homeless youth can receive temporary shelter and counseling services.

-- States can also use funds from the Social Services Block Grant ($2.7 billion in 1988); the Alcohol, Drug Abuse and Mental Health Block Grant ($495 million in 1988); and the Community Services Block Grant ($310 million in 1988) to aid the homeless.

HHS will continue the efforts of the Federal Interagency Task Force on the Homeless, begun in 1983, to coordinate Federal resources available to local, public, and private groups seeking to aid the homeless. Successful efforts of this Task Force include negotiating agreements with:

— HUD and USDA (FmHA) for single-family homes in their inventory to be used as shelters;

— DoD for the renovation and lease of DoD facilities to be used as shelters, for warehouse storage for food banks, and for the donation of non-marketable commissary foodstuffs to food banks; and

-- GSA for the lease of vacant Federal buildings to be used as shelters and for the donation of surplus Federal equipment to food banks and shelter operators.

In the area of teenage pregnancy, Secretary Bowen has set goals and developed objectives for youth and families for the year 2000. One objective is to reduce the incidence of out-of-wedlock teen pregnancies. The Department is interested in helping adolescents become productive self-sufficient responsible adults.

The Secretary's Initiative on Teen Pregnancy Prevention seeks to coordinate those programs within the Department which relate to the issue of teen pregnancy and to bring greater focus toward primary prevention. Our chief strategy is to encourage as many groups as possible to become aware of the problem and to use their influence at the community level to help communities build agendas which can lead to the reduction of out-of wedlock teen pregnancies. The Department's role is to provide leadership, information and funding assistance. No new money has been sought for this initiative; rather, efforts to target resources toward activities of prevention are being sought.

SUBCOMMITTEE RECESS

Senator CHILES. We will recess our hearings until this afternoon at 2:30, when we will hear from the National Institutes of Health, and we will focus on selected institutes, stroke, child health, eye, general medicine, and environmental health.

Mr. STANTON. Thank you, Mr. Chairman.

[Whereupon, at 11:35 a.m., Wednesday, March 11, the subcommittee was recessed, to reconvene at 2:30 p.m., the same day.]

(AFTERNOON SESSION, 2:30 P.M., WEDNESDAY, MARCH 11, 1987)

The subcommittee met at 2:30 p.m., in room SD–116, Dirksen Senate Office Building, Hon. Lawton Chiles (chairman) presiding.

Present: Senators Chiles, Weicker, and Harkin.

DEPARTMENT OF HEALTH AND HUMAN SERVICES

NATIONAL INSTITUTES OF HEALTH

STATEMENTS OF:

DR. JAMES WYNGAARDEN, DIRECTOR, NATIONAL INSTITUTES OF HEALTH

DR. MURRAY GOLDSTEIN, DIRECTOR, NATIONAL INSTITUTE OF NEUROLOGICAL AND COMMUNICATIVE DISORDERS AND STROKE

DR. LAWRENCE SHULMAN, DIRECTOR, NATIONAL INSTITUTE OF ARTHRITIS AND MUSCULOSKELETAL AND SKIN DISEASES

DR. DUANE ALEXANDER, DIRECTOR, NATIONAL INSTITUTE OF CHILD HEALTH AND HUMAN DEVELOPMENT

DR. CARL KUPFER, DIRECTOR, NATIONAL EYE INSTITUTE

DR. RUTH KIRSCHSTEIN, DIRECTOR, NATIONAL INSTITUTE OF GENERAL MEDICAL SCIENCES

DR. BETTY PICKETT, DIRECTOR, DIVISION OF RESEARCH RESOURCES

DR. DAVID RALL, DIRECTOR, NATIONAL INSTITUTE OF ENVIRONMENTAL HEALTH SCIENCES

DR. DONALD LINDBERG, DIRECTOR, NATIONAL LIBRARY OF MEDICINE

DR. DORIS MERRITT, ACTING DIRECTOR, NATIONAL CENTER FOR NURSING RESEARCH

ACCOMPANIED BY WILLIAM BELDON, ASSISTANT SECRETARY FOR MANAGEMENT AND BUDGET, DEPARTMENT OF HEALTH AND HUMAN SERVICES

INTRODUCTION OF ASSOCIATES

Senator CHILES. This is our third and last hearing the subcommittee will hold on the fiscal year 1988 budget proposals on the National Institutes of Health. This afternoon we are going to focus on the six institutes that cover the subject matters of environmental health, stroke and neurological disorders, child health, arthritis and skin disease, eyes, and general medicine. We will also hear testimony and focus questions on the National Library of Medicine and the National Center for Nursing Research, and the Division of Research Resources.

Dr. Wyngaarden, do you want to highlight your opening statement.

Dr. WYNGAARDEN. Thank you, Senator Chiles. We have the nine representatives of various institutes and divisions this afternoon. If I may

introduce them to you, starting on the far left is Mr. Beldon from the Department; Dr. Betty Pickett, the Director of Division of Research Resources; Dr. Carl Kupfer, Director of the National Eye Institute; Dr. Duane Alexander, Director of the National Institute of Child Health and Human Development; Dr. David Rall, Director of the National Institute of Environmental Health Sciences; Dr. Murray Goldstein, Director of the National Institute of Neurological and Communicative Disorders and Stroke; Dr. Ruth Kirschstein, Director of the National Institute of General Medical Sciences; Dr. Lawrence Shulman, Director of our newest, Arthritis and Musculoskeletal and Skin Diseases; Dr. Doris Merritt, who is the Acting Director of the Center for Nursing Research; and Dr. Donald Lindberg, Director of the National Library of Medicine.

I think each of these individuals is prepared to make a short statement.

PREPARED STATEMENTS

Senator CHILES. I would be happy to hear from them. We will start with the National Institute of Neurological and Communicative Disorders and Stroke.

All the written statements of all the directors will be placed in the record at this point and then they can give a brief summary.

[The statements follow:]

Statement of Murray Goldstein

Over the past three decades, the National Institute of Neurological and Communicative Disorders and Stroke (NINCDS) has played a major role in advancing our understanding of the detailed workings and disorders of the human brain and nervous system. During this period, the Institute has been a guiding force in furthering the state of knowledge of the brain and of the more than 650 neurological and communicative disorders that fall within its area of responsibility. I am pleased to report that there are clear signs of substantial progress and every expectation of major clinical advances.

Nervous system impairment is unlike any other impairment to the body. Neurological and communicative disorders strike at our most precious faculties and physical skills; our ability to perceive, to think and to perform. Some disorders strike at an early age, such as Tay-Sachs disease, Batten's disease, and muscular dystrophy, diminishing our development and limiting our ability to achieve adulthood as full members of society. Others occur in early adult life, including epilepsy, myasthenia gravis, head and spinal cord injuries, and multiple sclerosis, severely limiting our performance as active members of our society and our ability to achieve. Still other disorders occur in adult life and in the elderly such as stroke, Huntington's disease, Parkinson's disease, amyotrophic lateral sclerosis and Alzheimer's disease, often causing death or severe disability during our senior years.

Neurological and communicative disorders represent a major cause of death and disability in this country. Stroke, a serious neurological disorder, ranks third among all causes of death and is a major cause of long-term disability in America. Disorders such as tuberous sclerosis and neurofibromatosis are also often fatal. Some hereditary disorders, such as Gaucher's disease, Tay-Sachs disease, and Batten's disease, result in mental retardation, blindness, and death.

I am pleased to report that we are making progress in many areas, both basic and clinical. The study of learning and memory, for example, is in a most exciting phase. For the first time scientists have demonstrated that isolated damage to the hippocampus, a structure located deep within the brain, results in memory impairment. This is an important step in understanding and mapping the brain sites responsible for learning and memory. We also have learned that the hippocampus is not the site of storage or retrieval of remote memories, suggesting that the hippocampus may play a key role in the processing of new information that is transformed and eventually stored elsewhere in the brain. As a result of the insights gained through this research, we should be able to explain how and why the brain processes and stores the information it receives.

In related research, scientists have found evidence of a physical change in neural connections when the brain learns and stores information. Lasting changes have been found in specific neurons of animals that have undergone different kinds of learning trials. In addition, a certain pattern of electrical stimulation can make hippocampal neurons more sensitive to further stimulation for weeks, demonstrating an effect called long-term potentiation, a

possible mechanism for long-term memory formation. By increasing the number of connections between neurons, we hope to be able to train nerve cell populations to take over for those that die in Alzheimer's patients. Thus we are now penetrating the boundaries that have limited our understanding of how the human brain perceives, thinks, and makes decisions.

Potentially important applications to Alzheimer's disease may also emerge from current studies of neuronal implantation. Scientists have implanted cortical cells from young rats into the brains of aging rats enabling them to remember how to solve life threatening problems by methods they previously knew but have lost the ability to remember. This research may someday not only provide possible approaches for treating patients with Alzheimer's disease but for reversing memory deficits that result from processes of aging.

NINCDS scientists have recently reported a major advance in determining how disorders like Alzheimer's disease develop. These investigators have located part of the gene that may be responsible for the protein involved in the formation of deposits that accumulate in the brains of Alzheimer's patients. This finding represents an important clue in understanding the cause of Alzheimer's disease and provides the basis for further research that may one day lead to the prevention and treatment of this and other progressively deteriorating brain disorders.

Recognizing the need for more effective drugs to control epileptic seizures, the NINCDS has for several years supported the development and the preclinical and clinical evaluation of anticonvulsant drugs. This program is a national cooperative effort of government, universities and industry. In the preclinical segment of drug evaluation, the NINCDS Antiepileptic Drug Development (ADD) Program screens compounds completely dissimilar to any known or marketed drugs, and using animal models of seizures, determines the potential efficacy of these compounds. To date, nearly 11,000 compounds have entered preclinical evaluation. Of these, less than 1 percent have shown sufficient promise to proceed to testing in humans. This high rejection rate is fully comparable to the experience of commercial drug development programs, and reflects the sophistication of the ADD screening program which clinically tests only those compounds that show the greatest probability of success in humans. The number of compounds requiring further, more expensive testing, therefore, is limited to the most promising.

The clinical evaluation of an anticonvulsant drug takes place in two stages. The first stage consists of a pilot study in which the efficacy of a new drug is tested in carefully selected human volunteers. If the results of the pilot study show promise, a controlled clinical trial is conducted in which patients are randomly assigned to a treatment or a control group. Neither the patient nor the physician knows which subject is receiving the new drug. We anticipate that during the next year the number of epilepsy centers involved in clinical testing will be the largest in the record of the ADD Program. As has been the case throughout the history of the ADD Program, one of the Institute's principal goals is to promote the development of safe and effective compounds for the control of epileptic seizures. This program is part of the

Institute's total epilepsy research program aimed at understanding the brain disorder called epilepsy and how to prevent it.

The Institute has recently embarked on a number of clinical trials in other areas that we expect will have significant medical care implications. One trial was initiated because of questions that had been raised about the effectiveness of a procedure performed on patients who have suffered from strokes caused by narrowed carotid arteries, major arteries in the neck providing blood to the brain. This operation, referred to as an endarterectomy, is a procedure in which a surgeon cuts open the neck artery and strips away the atherosclerotic deposits that impede circulation through the carotid. Many stroke experts believe that this surgery may do more harm than good because the procedure itself may cause a piece of arterial plaque to break off or trigger a clot to form, either of which would cause a stroke. Also, the risk of the operative procedure may equal the risk of a stroke occurring without the procedure. Because of the uncertainties surrounding this procedure, the NINCDS has begun a multicenter clinical study of the effectiveness of a drug, versus the drug plus endarterectomy, in reducing the incidence of stroke in patients with significant asymptomatic narrowing of the carotid artery. Over 1,500 patients from 15 participating centers will be followed in a randomized clinical trial over a five-year period. We hope to determine not only the effectiveness of endarterectomy in preventing stroke, but the incidence of recurrent narrowing of the carotid artery following endarterectomy and the rate of progression or regression of carotid atherosclerosis in the group treated with the drug. Approximately 150,000 endarterectomies are performed in the United States each year. We anticipate, therefore, that this study will provide significant and useful findings regarding the extent to which the procedure actually improves the long-term outlook for patients at risk of stroke.

Nonvalvular atrial fibrillation, or NVAF, is a common affliction characterized by abnormal heart beats due to factors other than damaged heart valves. It affects two to five percent of the general population over 60. Approximately 35 percent of patients with NVAF will experience ischemic stroke during their life. Death or severe disability can be anticipated in at least half of NVAF patients who experience stroke. Although the presence of NVAF identifies patients at increased risk of ischemic stroke, there are no scientifically acceptable clinical data concerning the prevention of these strokes. This year, therefore, the Institute will initiate a multicenter clinical trial to determine whether prophylactic treatment with drugs reduces the risk of ischemic stroke and systemic embolism in patients with nonvalvular atrial fibrillation. We anticipate that the study will also determine whether it is possible to identify subgroups of patients with atrial fibrillation who have a particularly high or low risk of stroke. We are optimistic that the multicenter approach to this study will provide us with important new information on preventive strategies for stroke as well as fundamental insights into the neurovascular basis for this disorder.

As I reported last year, we have concluded a major clinical trial evaluating the effectiveness of extracranial-intracranial arterial bypass surgery, a procedure that for many years has been used in the prevention of stroke. This study revealed that,

despite the technical success of surgeons in revascularizing the arteries of the brains of patients with symptomatic atherosclerotic disease, there was no demonstrated benefit from this surgical treament. Investigators concluded that in view of the risks inherent in the surgery and in the absence of any benefit not available through nonsurgical treatment alone, the EC/IC bypass should no longer be performed as a preventive or therapeutic measure. The Office of Health Technology Assessment (OHTA) is currently reviewing the findings of the EC/IC study and will soon make a recommendation to the Health Care Financing Administration. Seven thousand procedures are performed in the United States each year at an average cost of $15,000. Therefore, if the OHTA should recommend that HCFA not reimburse for this procedure, the potential cost savings are enormous and the NINCDS-sponsored EC/IC study will have had a marked impact on lowering medical care costs as well as on reducing the use of unnecessary surgery.

Scientists have recently succeeded in reproducing the symptoms of Parkinson's disease by injecting mice with a "designer drug" called MPTP. MPTP, an analog of the synthetic narcotic drug Demerol, destroys cells in that portion of the brain that deteriorates as a result of Parkinson's disease. Researchers now believe that while MPTP itself is not toxic, the brain converts it into an extremely toxic compound using an enzyme called monoamine oxidase, MAO. We now have evidence that a number of drugs, including Deprenil, prevent mice injected with MPTP from developing symptoms of Parkinson's disease. These drugs work by inhibiting the enzyme MAO that metabolizes the MPTP. NINCDS-supported scientists will initiate a clinical trial to test several of these inhibitory drugs in patients with Parkinson's disease to evaluate whether this treatment will retard or arrest the progression of Parkinson's in humans. If these drugs succeed in halting the progress of Parkinson's, we will have come significantly closer to solving the mystery of this troubling disorder and to improving the quality of life of its victims. In many ways, this may be the next big breakthrough following L-dopa for the treatment of this dread disease.

The accomplishments I have presented were made possible because of our strong commitment to a comprehensive and stable research effort on the brain and nervous system. This effort requires the talent and skill of newly trained investigators. The Institute is making every effort to maintain the momentum of our support of research training and research career awards. We also recognize the important contribution made to the NINCDS program by our centers of research excellence. We continue to strive to maintain a balance between fundamental research which is the promise of the future and clinical research which makes research findings accessible to us now.

Mr. Chairman, the FY 1988 budget request for this Institute is $677,451,000. In addition, the Administration also proposes a policy of appropriating the total NIH allowance for research project grant commitments at the time that they are incurred. This approach to grant funding would inform the research community of the total funds available for continuation costs. In accordance with this proposal, the FY 1988 request includes $254,258,000 for future year commitments associated with competing project grants awarded in FY 1988. I will be pleased to answer any questions you might have.

Statement of Lawrence Shulman

I am honored to have this opportunity, as the first Director of this new Institute, to share with you programs and research advances achieved by our extramural and intramural scientists. The Institute supports a broad range of basic and clinical research in the areas of arthritis and musculoskeletal and skin diseases. These diseases are numerous and diverse. They afflict millions of American men and women, young and old. These diseases exact an enormous toll of human suffering, causing pain, deformities, disability and death; and impose a staggering economic burden for our nation.

Substantial progress is being made in many of these diseases. Many of these achievements were realized by innovative application of the latest biomedical research technologies in immunology, genetics, molecular biology, virology, biochemistry, and biophysics. I am delighted to discuss with you today highlights among these recent accomplishments on causal factors and new treatments, as well as some of our plans for the future.

Research on the causes of rheumatoid arthritis has entered a phase of heightened productivity. By utilizing restriction fragment length polymorphism, developed by recombinant-DNA technology, investigators this past year have identified two new DNA fragments that pinpoint precise sites on the human chromosome where susceptibility to rheumatoid arthritis resides. In addition, the search to identify infectious agents that initiate or trigger rheumatoid arthritis continues. Supplementing the evidence, reported last year, for identifying the parvovirus RA-1 in the joint lining in rheumatoid arthritis, inflammatory arthritis was found to be unexpectedly frequent during a recent epidemic of parvovirus in England. Another promising area of research includes a pathogenetic role for the nervous systems, based on evidence that the neurotransmitter, substance P, promotes joint inflammation in arthritis. There are encouraging reports on treating rheumatoid arthritis. Several reports this year have indicated great efficacy and general safety of methotrexate in low doses. Initial results with cyclosporin A have also been encouraging. A mechanism by which gold compounds may combat arthritis by blocking collagenase, the enzyme that destroys collagen, has been discovered. Similarly, preliminary evidence that tetracycline (an antibiotic) can block collagenase production in joint lining cells in rheumatoid arthritis has been reported.

On October 19-21, 1986, a major conference on "Molecular Biology: Its Potential for Advancing Rheumatology Research" was held at the National Institutes of Health as an NIH Centennial Event; it was sponsored by the NIAMS and the National Arthritis Advisory Board. Scientific experts in modern biotechnologies brought recent advances in molecular biology to the attention of both established and new investigators in the field of rheumatology. The conference gave special emphasis to basic research on immune-mediated diseases such as rheumatoid arthritis and lupus, inherited metabolic diseases, and connective tissue diseases such as osteogenesis imperfecta. It is expected that the conference will have a major impact on research in rheumatology. Immediately after the conference, a panel of senior scientists met and identified areas of arthritis and connective tissue disease

research and research training for future emphasis, by employing these new biotechnologies.

Osteoarthritis, the most common form of arthritis, affects some 16 million Americans, and is a leading cause of pain and disability. It mainly affects the cartilage of the joint causing it to fray, crack, ulcerate and erode, leaving, in extreme cases, an uncushioned bone-on-bone joint. Recent research has shown that osteoarthritis is not simply a wear-and-tear disease, nor is it merely the result of aging. There are important chemical differences between osteoarthritis and aging cartilage. Advances in biotechnology are setting the stage for future research on osteoarthritis. The detailed proceedings of a recent major scientific workshop on causative mechanisms of osteoarthritis have just been published. The workshop assembled over 60 experts in diverse scientific disciplines to review the current state of knowledge and to identify new directions for research on osteoarthritis. Over 100 specific recommendations for osteoarthritis research are included in the report, which is intended to encourage new research on this important disease. One exciting byproduct of the workshop is the recent development of a circulating biochemical marker of cartilage degradation in osteoarthritis. In addition, several new animal models of osteoarthritis have been developed by NIAMS grantees and found to be useful in studying early events in osteoarthritis. New studies on the reactivity of cartilage cells and biochemical and ultrastructure changes in cartilage are providing new leads as to the causes of osteoarthritis and innovative approaches to therapy.

Systemic lupus erythematosus (SLE) is a chronic, potentially serious, inflammatory disease affecting several organs of the body. More than 500,000 people in the United States have lupus; and most are young women. SLE is considered to be an autoimmune disease, with excessive production of antibodies directed at the body's own tissues. Investigators are attacking this disease on a number of fronts; basic immunologic and genetic research on underlying causes, and clinical studies to improve diagnosis and treatment. Several underlying genetic factors have been discovered. A recent study indicates that environmental factors also seem to be important; a study of lupus in genetically identical twins showed that lupus appeared in both twins in only one-fourth of the identical twins studied.

Recent studies have confirmed that black women have three-fold higher rates of prevalence of mortality from lupus than do white women. The peak age of mortality from lupus is also earlier in black women. The reasons for this are not clear.

With earlier diagnosis and improved therapy, the outlook for patients with lupus is much brighter today than it was previously; now, over 90 percent of persons with lupus survive 10 years after diagnosis. Further progress is expected through innovative therapies that correct the immune abnormalities of SLE. To illustrate, in studies of an experimental model of SLE, it was recently found that lipids derived from fish oils can block the emergence of both lupus nephritis and antibodies to DNA in these mice; trials with fish oils in lupus patients are in progress. The Institute has organized and is directing the activities of the Lupus Erythematosus Coordinating Committee, with representation

from all Institutes supporting lupus-related research. The Committee has met several times, and is preparing a report to Congress on the current state of research on SLE.

Osteoporosis is a condition of decreased bone density, causing the bones to become weak and break easily. It is the leading underlying cause of bone fractures in postmenopausal women and the elderly. A recent study has revealed that 24 million Americans have osteoporosis. The national economic burden from osteoporosis fractures in 1983 was $6.1 billion; and this will grow as our population ages. Normal bone metabolism comprises a complex balance between bone resorption and bone formation; this process is out of balance in osteoporosis. The Institute (NIAMS) has targeted research on osteoporosis and bone metabolism for intensive special emphasis in several ways. One is the issuance of a Request for Applications, jointly by NIAMS, NIA and NIDDK, for Programs of Excellence of Research on Osteoporosis. A program announcement seeking additional research on hormones and cytokines acting on bone has also been issued by NIDDK and NIAMS. To enhance communication among investigators and to speed research progress, the NIAMS organized, planned and sponsored, with NIA and NIDDK, a major Scientific Workshop on Research Directions in Osteoporosis, held in February at the NIH's Clinical Center. It was a highly successful event, there being over 700 participants and attendees. It provided an update of current scientific knowledge and a long list of recommendations for future research on: cellular mechanisms in osteoporosis, risk factors, bone mass measurements, calcium requirements, estrogen and other hormone replacements, physical exercise, calcitonin, fluoride and other strategies for prevention and treatment of osteoporosis.

Osteogenesis imperfecta, the most common of the inherited connective tissue diseases, is characterized by extremely fragile bones that tend to fracture with slight trauma. Research on biochemical and molecular defects of collagen in osteogenesis imperfecta has made substantial strides. In dramatic research investigators are now able to describe specific genetic defects at the molecular level for many forms of osteogenesis imperfecta. In the future, it may become possible to identify these collagen defects even before birth, and to develop methods for repairing or replacing the defective collagen genes.

Impairments of the back and spine are the most common cause of activity limitation in young adults (17 to 44 years of age). Their economic impact exceeds $10 billion per year. The causes of low back pain and the best ways to treat it are both unclear. Back pain research remains difficult, because of the complexity of the back's anatomic structures and nerve pathways. The Institute is planning a major scientific workshop on the etiology of low back pain, assembling experts in bones, nerves, discs and muscles to develop specific recommendations for multidisciplinary research.

The Institute, as a result of the Health Research Extension Act of 1985, has an expanded responsibility to increase research efforts in exercise patho-physiology and sports medicine. A new initiative in this area is a scientific workshop to be held in June 1987, on "Soft Tissue Injury and Repair," co-sponsored by the NIAMS and the American Academy of Orthopedic Surgeons. The Institute will also direct its efforts to understanding the

response of muscles to exercise in its various forms, and on physical training. It will encourage fundamental, interdisciplinary studies in exercise pathophysiology of the musculoskeletal system, as well as foster studies on sports injuries.

As many as 20 genetically distinct forms of epidermolysis bullosa (EB), a tragic blistering disease, have been described to date. Some are fatal early in childhood; others are severely disabling. Basic research on the area of skin where EB takes place, namely, the basement membrane zone, continues to provide important insights into the causes of EB. In EB there is a deficiency of anchoring fibrils that bind the outer and inner layers of skin together. These anchoring fibrils have been discovered recently to consist of Type VII collagen. Moreover, the enzyme collagenase, that destroys collagen, appears to be produced in excess in EB. I am also pleased to report that the NIAMS has organized and is supporting a National Registry of EB patients and their families. This registry will provide valuable information on the genetics and epidemiology of this tragic disease; and will facilitate multicentered studies on causal factors and new therapies.

Contact dermatitis is the skin's most common immunologic disease and an important cutaneous disorder in industry. Important new immunologic and cellular bases for the allergic reactions have been discovered. In the epidermis (skin's outer layer), the Langerhans cells have been found to have complement receptors, synthesize Ia antigens and present antigens to T-lymphocytes; they act to up-regulate (stimulate) the allergic response. Other recently discovered cells are also important; for example, Thy-1 bearing cells are also antigen-presenting cells but they down-regulate (suppress) the allergic reaction. These immunologic reactions can be modified by physical modalities, such as ultraviolet radiation.

I want to express particular gratitude to the Congress for including funds in the FY 1987 appropriations for nine Specialized Centers of Research (SCORs), three each in the high priority areas of rheumatoid arthritis, osteoarthritis, and osteoporosis. As you know, these Specialized Centers have been sought by the arthritis community and leading arthritis advisory groups for several years. There is great enthusiasm in the arthritis and musculoskeletal diseases research community for this new mechanism to concentrate research efforts on these diseases of national importance. Each center will have an integrated program of both basic science and clinical research. We expect to see rapid translation of advances in the basic sciences into clinical applications, and clinical imperatives providing direction for the basic sciences research.

Mr. Chairman, the FY 1988 budget request for this Institute is $201,073,000. In addition, the Administration also proposes a policy of appropriating the total NIH allowance for research project grant commitments at the time that they are incurred. This approach to grant funding would inform the research community of the total funds available for continuation costs. In accordance with this proposal, the FY 1988 request includes $78,064,000 for future year commitments associated with competing project grants

awarded in FY 1988. I will be pleased to answer any questions you might have.

Biography of Lawrence Shulman

July 25, 1919. Boston, Massachusetts

Education: Harvard University, A.B., 1941; Yale University Graduate School, Ph.D., 1945; Yale University School of Medicine, M.D., 1949.

Professional History: 1949-50, Intern, Medicine, The Johns Hopkins Hospital, Baltimore, Maryland. 1950-51, Ayerst, McKenna and Harrison Fellow in Endocrinology, The Johns Hopkins University School of Medicine. 1951-52, Vernon D. Lynch Fellow in Internal Medicine, The Johns Hopkins University School of Medicine. 1952-53, Assistant Resident, The Johns Hopkins Hospital. 1954present, Physician, The Johns Hopkins Hospital. 1955-75, Director, Connective Tissue Division, Department of Medicine, The Johns Hopkins University School of Medicine. 1960-66, Physician-in-Charge, Arthritis Clinic, The Johns Hopkins Hospital. 1956-67, Physician-in-Charge, Connective Tissue Clinic, The Johns Hopkins Hospital. 1966-69, Physician-in-Chief, Division of Chronic and Community Medicine, The Baltimore City Hospitals, Baltimore, Maryland. 1970-73, Associate Professor of Medical Care and Hospitals, The Johns Hopkins University School of Hygiene and Public Health. 1964-present, Associate Professor of Medicine, The Johns Hopkins University School of Medicine. 1976-80, Acting Associate Director for Arthritis, Musculoskeletal, and Skin Diseases, National Institute of Arthritis, Metabolism, and Digestive Diseases. 1980-83, Associate Director, Arthritis, Musculoskeletal and Skin Diseases, National Institute of Arthritis, Diabetes, and Digestive and Kidney Diseases. 1983-1986, Director, Division of Arthritis, Musculoskeletal, and Skin Diseases, National Institute of Arthritis, Diabetes, and Digestive and Kidney Diseases. 1986, Acting Director, National Institute of Arthritis and Musculoskeletal and Skin Diseases. 1987-present, Director, National Institute of Arthritis and Musculoskeletal and Skin Diseases.

Professional Organizations: American Association for the Advancement of Science, American College of Physicians, American Federation for Clinical Research, American Rheumatism Association (President, 1974-75), American Society for Bone and Mineral Research, The Arthritis Foundation, Brazilian Society of Rheumatology, Carla Curzio Neapolitan Society, Lupus Foundation of America, New York Academy of Science, Pan American League Against Rheumatism (President, 1982-86), Society for Clinical Trials, Sydenham Society, Society for Investigative Dermatology.

Honors, Awards: Senior Investigator Award, The Arthritis Foundation, 1957-62. Pemberton Memorial Lecture, 1963. Fellow, American College of Physicians, 1967. Wallace R. Graham Memorial Lecture: Toronto, 1973. The Heberden Medal for Research in The Rheumatic Diseases, Heberden Society, London, 1975. Distinguished Service Award, The Arthritis Foundation, 1979. Honorary Member, Brazilian Society of Rheumatology, 1980. Honorary Member, Chilean Society of Rheumatology, 1981. Knowles Lecture: San Francisco, 1982. Honorary Member, Costa Rican Association of Rheumatology, 1984. Honorary Member, Australian Rheumatism Association, 1985. The Public Health Service Superior Service Award, 1985. National Lupus Hall of Fame, 1986.

Statement of Duane Alexander

The mission of the National Institute of Child Health and Human Development (NICHD) is to improve the health and well-being of men, women, and children at every age through research on developmental processes throughout the life cycle. The problems addressed include birth defects, mental retardation, infertility, teenage pregnancy and learning disabilities. The Institute's research program also encompasses important public health concerns such as infant mortality associated with low birth weight or premature delivery, Sudden Infant Death Syndrome, AIDS, and family planning.

In its own life cycle, the NICHD is approaching robust young adulthood. This year, the Institute is marking its twenty-fifth anniversary. The maturation the Institute has undergone since its establishment in 1962 is reflected by its aggressive approach to problems that have long resisted solution. This is exemplified by the Low Birth Weight Initiative launched in 1984. This multi-prong research attack on infant mortality is now well under way and we have already made some impressive strides.

NICHD-supported scientists have developed a technique that looks very promising for saving the lives of premature infants at risk for Respiratory Distress Syndrome (RDS). Each year, this disorder affects some 40,000 babies, most of them premature. NICHD-supported scientists have discovered that human surfactant, a lung lubricant, administered within a few seconds after birth to very premature infants, significantly reduces the incidence and severity of breathing problems, cuts their death rate, and shortens their hospital stay, while showing no serious side effects. This treatment has the potential to prevent most of the 8,000 deaths attributed to RDS each year in the U.S.

This past year the NICHD launched two major collaborative networks through which we expect to make significant progress. One of these networks focuses on maternal-fetal medicine and the other on neonatal intensive care. The purpose of these networks is to develop and test new therapeutic and preventive techniques and medications so that they can be evaluated and incorporated into the mainstream of medicine more quickly than is now the case. Initial collaborative clinical trials in these networks are focusing on preventing and managing premature rupture of the amniotic membranes during pregnancy and preventing infections in low birth weight infants.

Growth is a major research interest of the Institute. The NICHD was honored last year to have a grantee we have supported for 23 years, Dr. Stanley Cohen, awarded the Nobel Prize in Physiology or Medicine. Dr. Cohen shared the award for his work with nerve growth factor and epidermal growth factor. These growth factors help regulate the basic mechanisms by which cells grow, divide or specialize into one cell type or another.

Dr. Cohen's work and that of others in the field has laid the foundation for a better understanding of the causes of birth defects and other developmental malformations. Many NICHD studies are focused on early fetal development. Understanding these processes at the cellular level may eventually lead to measures by which physicians can intervene to prevent birth defects.

Some genetic diseases are yielding to this approach. For example, NICHD intramural research scientists have developed a successful treatment for a rare genetic disease. They have found that the orphan drug cysteamine is able to stop the kidney damage,

severely delayed growth and vision problems that accompany cystinosis, a genetic disease which affects about 200 children in this country. Untreated, the disease destroys the kidneys; nearly all of the affected children require kidney transplants by their 10th birthday and many never reach adulthood.

In another major advance, scientists in one of the 12 NICHD-supported Mental Retardation Research Centers have isolated a part of the normal gene that, when defective or missing, causes Duchenne muscular dystrophy. This severe, muscle-wasting disease is associated with mild mental retardation in about one-third of the children it strikes. It affects and ultimately kills 1 in 3,500 boys born each year. By identifying the gene responsible, scientists can now work to clone the entire gene, and determine its product and the product's mode of action, in an effort toward developing an effective treatment.

Another NICHD-supported research team has successfully cloned the gene responsible for phenylketonuria (PKU), an inborn error of metabolism which, if untreated, results in severe mental retardation. This team has also performed the first prenatal diagnosis of PKU, and developed a method for population screening for the gene defect involved. Their progress has made it possible to begin work toward a genetic therapy for PKU. Already they have inserted the human gene into mice and demonstrated that it functions.

Despite advances in molecular biology and other high technology fields, children around the world are still dying of common diseases. Pertussis is one such disease. Even though there is a pertussis vaccine available, it carries a significant risk of side effects. As a result, some nations have stopped administering it, resulting in a resurgence of pertussis in those countries. NICHD intramural scientists have developed a new vaccine against pertussis that they believe will be safer and more effective. The new vaccine does not contain the whole pertussis organism as does the current vaccine but, rather, uses a single purified protein, inactivated pertussis toxin, to produce immunity. The new vaccine has been tested on normal adult volunteers at the NIH Clinical Center. It induced very high antibody levels with no side effects. Pilot studies in children and infants are now in progress in Sweden and Massachusetts in preparation for large scale field trials.

Not all problems which threaten health and well-being are caused by conditions as easily identifiable as a bacterium or virus. For example, Sudden Infant Death Syndrome (SIDS), the leading cause of death of infants between one and twelve months of age, continues to baffle researchers. One controversy is whether home monitoring is effective in preventing SIDS in infants with a history of apnea. To help resolve this controversy, the NICHD convened a consensus development conference this past year. The consensus panel recommended electronic home monitoring for only a small proportion of infants, based in part on research evidence presented by NICHD epidemiologists which indicates that apnea associated with prematurity is not as important a risk factor for SIDS as had previously been thought. To foster further SIDS research, the NICHD last year issued a request for grant applications on SIDS, and in FY 1987 funded 8 new studies directed toward finding the causes of this problem.

NICHD research findings made a substantial contribution to a second landmark report released this year, the National Academy of Sciences' report Risking the Future: Adolescent Sexuality,

Pregnancy, and Childbearing. The report emphasizes that in both human and monetary terms, it is less costly to prevent unintended teenage pregnancy than to cope with its consequences. The report's recommendations make clear the need to make pregnancy prevention methods readily available to sexually active teenagers. The report also emphasizes that boys' attitudes, motivations, and behaviors are as central to the problem as those of their female partners. The report's conclusions and recommendations closely parallel activities in the NICHD research program, and we are at work planning to implement its recommendations for future research.

The NICHD is supporting development of new contraceptive methods that are safe, efficacious, inexpensive, reversible, and acceptable not only to adolescents, but to various segments of the population. The NICHD Contraceptive Development Initiative is designed with this goal in mind. An NICHD contractor has completed a multicenter clinical trial which found that the cervical cap and the diaphragm are similar in effectiveness. The data should lead to the cervical cap being approved and marketed for general use.

In other contraceptive development areas, a clinical trial is under way to assess the effectiveness and acceptability of a vaginal sponge with a new spermicidal agent. Improved understanding of the body's immune response is being utilized as a new approach to contraception in males. Researchers have succeeded in immunizing male monkeys against certain hormones critical to reproduction and rendering the animals infertile without affecting their libido. Progress is also continuing in developing a new long-acting injectable contraceptive, and clinical trials are continuing with Capronor, a capsule implant inserted under the skin that slowly releases a contraceptive hormone. The release of this hormone through patches applied to the skin is also being studied.

In addition to its research in the biomedical and reproductive sciences, the NICHD also supports a broad base of behavioral research studies.

Learning disability is a major focus of interest. It is estimated that as many as 15 percent of this country's school age children are affected to some degree by a learning disability. The magnitude of this problem was reflected, in part, by the overflow audience attracted to a recent National Conference on Learning Disabilities coordinated by the Institute for the Interagency Committee on Learning Disabilities. The proceedings from this meeting will form the basis of a report on research needs to be submitted to the Congress by the Interagency Committee as required by the Health Research Extension Act of 1985.

Dyslexia, difficulty in learning to read, is the most common learning disability. Inroads are being made against this difficult problem, both in understanding its causes and its treatment. For example, NICHD researchers have linked a specific chromosome anomaly to one type of dyslexia. In 1986, a new diagnostic test for specific reading disabilities in children and adults was released in kit form. The Decoding Skills Test, developed by NICHD contractors primarily as a research tool to bring uniformity to the testing of dyslexia subjects, is expected to be used also in the development of new methods to treat dyslexia.

The NICHD is placing increased emphasis on research leading to ways to prevent childhood injuries, the major cause of death of children after the first year of life. The Institute recently funded studies resulting from a Request for Applications in the area of childhood injuries for studies to clarify the major behavioral and environmental variables responsible for accidents

resulting in injury. In response to a request from the Congress, the Institute has prepared a 5-year plan for increasing this effort in injury prevention which we are eager to implement to deal with this major public health problem of children and young adults.

The NICHD is also directing attention to certain aspects of AIDS. We have funded a study evaluating, under laboratory conditions, the ability of various spermicides to kill the AIDS virus, preparatory to a clinical trial of the efficacy of their combined use in preventing its transmission. We are assessing the transfer of the AIDS virus from mother to fetus, and the developmental impact of transmission of the virus at that time or its acquisition with or without active disease during childhood. Our intramural scientists are studying the cellular receptor for the AIDS virus to learn how receptivity might be blocked, and are attempting to develop a much-needed transgenic mouse model for the disease.

In summary, the NICHD strives to improve the health and well-being of every segment of the American population, by supporting research that will lead to reduced infant mortality, to freedom from the threat of life-impairing diseases and disabilities, and to fulfilling the expectation of a planned, uncomplicated pregnancy resulting in the birth of a wanted, healthy baby.

Mr. Chairman, the FY 1988 budget request for this institute is $493,236,000. In addition, the Administration also proposes a policy of appropriating the total NIH allowance for research project grant commitments at the time that they are incurred. This approach to grant funding would inform the research community of the total funds available for continuation costs. In accordance with this proposal, the FY 1988 request includes $171,204,000 for future year commitments associated with competing project grants awarded in FY 1988. I will be pleased to answer any questions you might have.

Statement of Carl Kupfer

Visual problems take a terrible toll in this country. Almost 13 million Americans are visually impaired, and half a million of these are legally blind. Each year, 16 billion dollars are spent to provide professional care and special services to people with eye problems. Fostering research to improve the treatment, prevention, and rehabilitation of visual disorders is the mission of the National Eye Institute (NEI). Through the NEI, America's taxpayers make an ongoing investment in research to preserve sight and reduce the national burden of visual disability.

One of the most urgent research needs we face today is to find a means of preventing cataract, or at least slowing its development. Cataract is one of the most widespread of all eye disorders. About 5 million Americans are affected by it, and that number may increase in coming decades. This is because the average age of the population is rising, and more and more people are moving into the over-55 age bracket where cataract generally strikes. Unless some means of prevention is found, cataract operations, which currently number almost a million a year, could double in frequency by the early years of the next century. Such an increase would mean an almost unimaginable strain on health care resources. So, although cataract

surgery is one of the most successful operations known, we must find a way to limit the need for it.

Over the past decade, scientists supported by the NEI have made considerable progress in understanding the biochemical changes in the lens of the eye that lead to cataract. These are the processes that would have to be blocked or reversed in order to achieve prevention. Thanks to the recent research, it is now clear that the key process in cataract development is oxidation--a chemical reaction that increases the oxygen content of a molecule. The proteins in the fibers of the lens are vulnerable to oxidation, just like proteins in other parts of the body. But the lens, unlike the skin or the lining of the intestine, does not shed and replace old cells. They remain indefinitely, and any harmful changes accumulate over time. Scientists have shown that oxidation can cause abnormal clumping of proteins in the center of the lens. If these clumps become so large that they interfere with the passage of light, vision is impaired. This is the basis of cataract. Oxidation also has a destructive effect in the outer areas of the lens. Here it can alter a cell membrane's ability to regulate inflow and outflow of various substances, and the resulting cellular damage can also lead to cataract.

Emphasis is now being placed on identifying the particular species of molecules within the lens that are responsible for these harmful oxidative reactions. With the benefit of this knowledge and other information that will emerge from continued research, scientists and pharmaceutical firms may soon be able to design drugs that will prevent or slow the development of cataract. The implications of this are enormous: If the need for cataract surgery could be postponed by ten years per patient, that would reduce cataract operations by 40 percent. And a delay of just a few years per patient would be enough to halt the year-by-year increase in cataract operations.

Research on diabetic eye disease is also yielding hopeful findings of great public health significance. As I have indicated in past testimony, there are 10 to 11 million people with diabetes in this country, and 40 percent of them have at least mild signs of a potentially blinding eye disease called diabetic retinopathy. Research has already paid off with laser therapies which can prevent serious visual loss in people with advanced diabetic retinopathy, but there remains a need for treatments that can prevent the disease itself. The aldose reductase inhibitors--a class of drugs initially developed at the NEI--have shown tremendous promise as a means of preventing not only diabetic retinopathy, but the nerve and kidney complications of diabetes as well.

Within the last year, findings from all over the world have further strengthened our confidence in the potential value of these drugs. Scientists in several nations have obtained clinical evidence suggesting that aldose reductase inhibitors can prevent or reverse diabetic neuropathy, the painful and disabling nerve disease that develops in many diabetics. Also, there is now evidence that kidney abnormalities which occur in diabetes may be prevented or reversed by these inhibitors.

Clearly, it is critical that we obtain definitive clinical evidence of the full potential of these drugs. At present, the NEI

is overseeing a major clinical trial to learn whether aldose reductase inhibitors can prevent or slow the development of diabetic retinopathy and diabetic neuropathy. Called the Sorbinil Retinopathy Trial, this multicenter study has completed recruitment of 500 insulin-dependent diabetic patients. Some have now been followed for as long as 3 years. We expect that within a few more years the Sorbinil Retinopathy Trial and other clinical investigations will tell us whether aldose reductase inhibitors are truly safe and effective. If so, many more people with diabetes can be spared sight- and life-threatening complications.

In addition to these studies, which are aimed primarily at diseases that affect adults, the NEI supports research aimed at improving the visual health of children. We know that 5 percent of children have eye problems, and many of these are present at birth or soon after. These conditions, which include misalignment of the eyes and optical abnormalities, need to be detected and corrected in infancy or the preschool years. If such problems are not corrected in a timely fashion, the child may develop amblyopia--decreased vision in one eye--and be burdened for a lifetime with this handicap. Yet until recently there has been no practical way of screening large numbers of infants and toddlers for visual disorders.

Now researchers supported by the NEI have developed a screening system that shows great promise for widespread use among children in this age bracket. The system uses an ordinary flash camera to produce a photograph that will show whether the eyes are properly aligned, and whether there is cloudiness suggestive of cataract in either eye. Also, the picture will tell whether either eye has astigmatism or is more farsighted or nearsighted than the other eye. Should abnormalities be found, the child would be referred to an eye care specialist for further assessment and possibly treatment. This screening system does not require any verbal ability or cooperation on the part of the child, and thus can be used on much younger children than can be tested with current techniques. In fact, it is so easy to use that it could be employed by non-medical professionals at day care centers and health clinics. If this screening system lives up to its promise, it could result in a great improvement in the chance that children who have eye problems will attain good vision.

NEI-supported scientists have also recently made important progress in the understanding of a particularly devastating childhood eye problem--the rare eye cancer retinoblastoma. They have isolated--or at least have come very close to isolating--the gene that is involved in hereditary cases of this disorder. Identification of this gene is expected to facilitate the search for methods of predicting which infants in high-risk families will develop retinoblastoma. Also, the finding has advanced cancer research by illuminating the molecular genetic basis for certain other types of cancer. And, speaking of molecular genetic techniques, they have also been used to discover the molecular basis of color vision in humans. These new tools of molecular biology are being applied to other major problems of vision research, and will be even more widely used in coming years.

Eye problems arising from infectious diseases are another target for NEI-supported research. Within the last year, NEI grantees have

developed important new information about the herpes simplex virus, which is responsible for about 500,000 eye infections each year. Once a person has had a herpes eye infection, there is a 50 percent chance that it will recur within 2 years, even if the infection was successfully treated with antiviral drugs. This is because the virus remains in a dormant or latent state in nerves near the eye and can mount another attack on it at any time. For years we have been looking for a way to disable the latent virus and break the cycle of recurrent infection. Now NEI grantees have discovered that the latent herpes virus is not wholly dormant but shows some activity in infected nerve cells. This suggests that it may in fact be possible to devise a drug or vaccine that in effect jams the machinery of the latent virus, and prevents it from reinfecting the eye. NEI grantees are attempting to develop methods of achieving this.

NEI-supported scientists have also been active in research on the eye complications of acquired immune deficiency syndome (AIDS). One of these eye problems, an infection called cytomegalovirus or CMV retinitis, is responsible for many cases of blindness among patients with advanced AIDS, a situation that means additional suffering for individuals who are already weakened and in pain from the other aspects of the disease. Last year a group of researchers led by NEI intramural scientists showed that a drug called DHPG (dihydroxy propoxymethyl guanine) is effective against CMV retinitis in AIDS patients. In more detailed studies, NEI grantees confirmed the finding. Even though the progression of AIDS is not affected by DHPG, the patients' eyesight often can be protected by this treatment. This will become even more important if methods are found to lengthen the survival time of people with AIDS.

In addition to supporting research within the United States, the NEI is engaged in cooperative international research projects. Several of these are now in progress in India under the Indo-U.S. Science and Technology Program. Among the topics under study is the relationship between vitamin A deficiency and health problems, including the devastating eye disease known as nutritional blindness, or xerophthalmia. In developing countries, this disorder affects 5 to 10 million children under age 6. Recently, a study was completed of the way in which measles and low vitamin A levels interact to cause eye problems in children at high risk for xerophthalmia. Another group of scientists published a study of absorption of oral doses of vitamin A in children with acute diarrhea, which is often a precipitating factor for xerophthalmia. They found that children with diarrhea absorbed sufficient vitamin A to reduce the risk of xerophthalmia. Eventually, the studies being conducted under this program are expected to lead to a better understanding of xerophthalmia and other blinding diseases that occur with high frequency in India. Some of these, such as cataract, are major problems in this country as well.

I believe that the accomplishments I have highlighted today provide evidence that the National Eye Institute and the scientists whose work it supports are making substantial progress toward improving the visual health of a wide spectrum of individuals in this country and abroad. In this way, we are striving to reduce the burden of visual disease and disability and enhance the quality of life for people around the world.

Mr. Chairman, the FY 1988 budget request for this institute is

$295,700,000. In addition, the Administration also proposes a policy of appropriating the total NIH allowance for research project grant commitments at the time that they are incurred. This approach to grant funding would inform the research community of the total funds available for continuation costs. In accordance with this proposal, the FY 1988 request includes $110,871,000 for future year commitments associated with competing project grants awarded in FY 1988. I will be happy to answer any questions you might have.

Statement of Ruth Kirschstein

I am particularly pleased to present the programs of the National Institute of General Medical Sciences (NIGMS) to you this year since it marks not only the centennial of NIH, but the twenty-fifth anniversary of this Institute. The past quarter century has been marked by dramatic advances in our understanding of all facets of biology; many of these advances have been supported by NIGMS. By developing fundamental concepts regarding the cells that make up the body, the genetic material present in each and every cell, and the chemicals essential to the functioning of these cells, we have begun to gain the knowledge needed to prevent or conquer the many diseases that plague mankind.

In recent years, studies of the genetic and molecular events that are critical to normal development and normal function point toward the importance, in these events, of the physical structure of large molecules, such as proteins and the nucleic acids, DNA and RNA. For example, in order to "catalyze" or speed up a key metabolic reaction, a particular part of an enzyme molecule may need to make "an exact fit" into a specific nook or cranny of the molecule being broken down. Or a particular twist or turn of a tightly coiled strand of DNA inside a cell may have to change its shape in order to permit that segment's genetic message to be expressed. The study of the relationship between the structures of such molecules and their functions has come to be known as "structural biology," and is one of the most exciting areas of biological science today. NIGMS has played a significant role in facilitating research in structural biology through support of the development and enhancement of important new tools, such as recombinant DNA technology, cloning methods, X-ray crystallography and nuclear magnetic resonance (NMR) spectroscopy.

One class of molecules, the proteins, is under intensive study by structural biologists. Understanding protein structure is vital to investigations related to health, because, in the words of a recent National Academy of Sciences (NAS) report:

> Proteins are involved in every biological function. As enzymes, they catalyze the chemical reactions in cells. As hormones and growth factors, they regulate the development of cells and coordinate the functions of distant organs in the body. In various filamentous forms, they control the shape of cells and the dramatic alterations that occur during cell division. . . . As components of membranes, they control the traffic of molecules and information among various cell compartments.

We know, for example, that cells contain proteins which are essential, not only to their own functioning, but also to the specialized functions of tissues and organs at sites throughout the body. Some of these proteins remain active for a relatively long time, whereas others are short-lived. The selective breakdown of proteins is critical for the proper functioning of cells but, until now we did not know how such breakdown is controlled. Recently, Dr. Alexander Varshavsky, an NIGMS grantee at the Massachusetts Institute of Technology, has applied the techniques of genetic engineering to construct changes in the genes that code for the string of amino acids that make up the sequences of particular proteins within a cell. When Dr. Varshavsky studied the process by which these proteins are broken down, he found that certain amino acids in the "end position" confer long life on the protein, others, a very short life and still others, some period in between. Indeed, he was able to rank the various amino acids with respect to the length of survival conferred on a particular protein. Dr. Varshavsky's work is typical of much of the research supported by NIGMS, in that it makes use of sophisticated technologies to determine basic biological mechanisms. It may also be of value to chemists seeking to prevent the too-rapid breakdown of drugs in the body.

A number of scientific developments have made it possible to expand studies in structural biology. First is the availability -- in some cases for the first time -- of large amounts of proteins of particular interest. Before the advent of new methodologies such as recombinant DNA techniques, it often was very difficult to obtain sufficient quantities of a protein to study it in detail. Second, important advances have been made in instrumentation that facilitate studies of three-dimensional structures. Using better X-ray detectors, coupled to larger and faster computers, NIGMS grantees, along with other scientists, recently have undertaken a monumental effort which has led to the elucidation of the structures of the proteins on the surfaces of viruses such as influenza, polio and the common cold virus. Understanding these structures in detail will allow scientists to construct molecules that can bind to them so as to tailor-make specific vaccines as well as antiviral drugs. Efforts are now underway to perform the same type of structural analysis of the the AIDS virus. However, it must be emphasized that this is an extraordinarily difficult task, one that will require highly skilled and imaginative scientists as well as special instrumentation.

Future studies in structural biology must, of course, be complemented by continuing efforts in other basic scientific areas. Indeed, the dramatic achievements which have occurred in the field of molecular genetics -- about which we have told you in recent years -- have set the stage for studies in structural biology such as those described above.

One basic question that has intrigued scientists is how the biological activity of a molecule is related not only to its physical structure, but to its chemical structure as well. Here again, new technologies have been essential. Through the use of modern molecular methods, including the synthesis of artificial fragments of nucleic acids, NIGMS grantees located at the University of Colorado and the California Institute of Technology have been able to study the chemical structure of "transfer RNA." This molecule is an intermediary in the process of translating the genetic instructions contained in DNA into the final production of a given protein.

These grantees have discovered that the specificity and efficiency of translation are determined by the chemical structure of the particular transfer RNA. This structure helps to assure that transfer RNA can "proofread" the order of the amino acids so that the specific protein is assembled properly. Errors in protein composition can lead to metabolic defects -- the cause of many diseases, including some liver diseases.

Other NIGMS supported scientists are investigating the proteins that are responsible for muscle contraction and relaxation. In the early 1970s, cell biologists learned, to their surprise, that these same contractile proteins are found within the backbone, or cytoskeleton, of each cell. Their function appears to be to control movement of materials within the cell, as well as between cells, and collaboration with intramural NIH scientists, are actively studying these intracellular contractile proteins in order to understand the regulation of the assembly of the filaments. One of their approaches is to use X-ray crystallography to attempt to relate the physical structure of certain of these contractile proteins to their function in the difficult task of transporting chemicals through the streaming cytoplasm within the cell.

All of these examples illustrate the dynamic, rapidly evolving state of our knowledge of cell biology, molecular biology, genetics, and structural biology. What makes these studies so exciting is that they are opening up prospects for the development of new diagnostic tools, new preventive agents and new therapeutic interventions.

For example, it is now possible to improve the design of drugs using these new techniques. Ideally, a drug should be targeted to a specific molecule or even to a specific region of such a molecule. By using techniques such as molecular cloning and nucleic acid sequencing, as well as new methods of analysis of molecular structure, it is possible to identify potential sites on a target molecule with which a specific drug can interact. One such drug, psoralen, has been used for some time to combat certain skin diseases. Psoralen is known to bind to DNA and to block its function. Biochemists have attached psoralen to a unique fragment of nucleic acid which is complementary to the genetic material of the herpes virus. This fragment then binds to the viral nucleic acid, preventing the herpes virus from multiplying, thus possibly cutting short the infection. This approach is now being explored in regard to infection with the AIDS virus. It should be pointed out that the results of past studies of molecular biology are responsible for the remarkably rapid understanding of the AIDS virus which, in turn, has permitted this rational approach to specific antiviral drugs.

As you can see, the prospects that discoveries coming from basic research will have an impact on the diagnosis and treatment of disease are brighter and brighter. To bring this promise to fruition requires the hard work and creativity of many well-trained, highly qualified individuals. Recognizing this need, the NAS report on "Protein Structure and Biological Function" recommends that "predoctoral training programs (be) maintained at a level at least equal to their present levels" and urges that "postdoctoral fellowship programs be maintained and, if possible, expanded to cover the present and anticipated needs in structural biology."

Well-trained research scientists, particularly those skilled in the techniques of nucleic acid sequencing, molecular cloning and X-ray crystallography, are in great demand not only by academia, but also by pharmaceutical and biotechnology firms, as they seek to maintain the industrial competitiveness of the United States.

I am pleased to report that, with the funds appropriated for research training in FY 1987, the NIGMS once again has been able to provide such training opportunities to highly motivated and bright young people. In particular, the Medical Scientist Training Program, widely recognized by everyone as a particularly effective source of highly qualified physician researchers, will support 710 students this year, the largest number in many years. These trainees, as you know, go on to have outstanding research careers.

Another NIGMS special research training program, the Minority Access to Research Careers (MARC) Program, also continues. Its accomplishments will be highlighted in October 1987 in a symposium to be held jointly with the Minority Biomedical Research Support Program of the Division of Research Resources as part of the NIH Centennial observance.

In summary, the biologic revolution continues and the opportunities to expand our knowledge have never been greater. The results of basic research are being translated, more rapidly than we might ever have expected, into studies directly related to specific diseases. The momentum is great. The promise is enormous.

Mr. Chairman, the FY 1988 budget request for this institute is $873,552,000. In addition, the Administration also proposes a policy of appropriating the total NIH allowance for research project grant commitments at the time that they are incurred. This approach to grant funding would inform the research community of the total funds available for continuation costs. In accordance with this proposal, the FY 1988 request includes $391,548,000 for future year commitments associated with competing project grants awarded in FY 1988. I will be pleased to answer any questions you might have.

Statement of Betty Pickett

I am pleased to present the FY 1988 budget request for the Division of Research Resources. The Division of Research Resources, which celebrates its 25th anniversary in 1987, develops, supports, and administers research resources through five multicategorical programs of specialized research facilities and environments: The Clinical Research Program; the Biomedical Research Technology Program; the Laboratory Animal Sciences and Primate Research Program; the Biomedical Research Support Program; and the Minority Biomedical Research Support Program. These resources undergird the research efforts of research scientists who hold more than 5,800 PHS research grants totaling in excess of $1 billion.

The 78 General Clinical Research Centers, which comprise the equivalent of a 600-bed research hospital, provide essential research environments for clinical investigators supported by PHS awards and for recruiting young physicians into careers in clinical research. CLINFO, the Centers' recently updated computer driven

data management and analysis system, provides the statistical and analytical tools needed for analysis of clinical data.

Over the past two years, the Clinical Research Program has experienced a three-fold increase in the use of facilities that accommodate the increase in AIDS-related research. For example, sixteen of the 19 AIDS Treatment Evaluation Units (ATEU) recently funded by the National Institute of Allergy and Infectious Diseases are using General Clinical Research Centers. Further, many of the Centers are currently involved with studies defining the natural history of AIDS and the effect of treatment with either immunomodulating agents or drugs which affect the replication of the human AIDS virus within cells.

Researchers at the General Clinical Research Center at the Medical College of Virginia have been studying inborn errors of metabolism, which result in deficiencies of enzymes within cells. A deficiency of one enzyme, biotinidase, which normally enables the body to recycle and reuse the vitamin biotin, can lead to severe medical problems and even death. Until recently, there has been no method of detecting this debilitating enzyme deficiency at birth, and it is only after a few months or years that affected children develop neurologic abnormalities, including mental retardation, and failure to grow properly. The Virginia researchers have now developed an economical, reliable test for this abnormality which can diagnose this condition before clinical evidence of the enzyme deficiency becomes apparent, enabling an economical and highly effective treatment regimen to be implemented at an early stage of the disorder.

The Biomedical Research Technology Program administers resources that identify, develop and provide access to advanced technologies needed in biomedical research. The Program emphasizes biomedical computing, biomedical engineering, and technologies for the study of biomolecular and cellular structure and function.

Two examples of medically relevant advances made in those resources follow. Conventional x-ray angiography, a diagnostic procedure for viewing the condition of the coronary arteries, is a difficult and expensive procedure which requires the injection of iodine-containing dye through a catheter directly into the arteries. A new procedure--synchrotron radiation angiography--developed at the BRT resource center at Stanford University, requires no arterial catheter and reduces radiation exposure while promising to produce results comparable to those obtained through older methods.

The Laser Microbeam Biotechnology Resource Center at the University of California, Irvine, has developed a promising new genetic engineering technique that allows the direct transfer of a gene onto a cell membrane of human cells in culture. The new method appears to be 100-fold more efficient than previous chemical methods and easier to do; it is expected to be of considerable future value.

The Laboratory Animal Sciences and Primate Research Program supports the seven Regional Primate Research Centers, animal diagnostic laboratories, training of research specialists in

laboratory animal sciences, development of animal and non-animal models, the improvement of laboratory animal facilities, and other resources which support biomedical research.

During the past year, the Primate Research Centers have continued to make important contributions in numerous research areas such as infectious diseases, neurosciences, toxicology, immunology, reproductive biology, nutritional and metabolic diseases and environmental health sciences. Recent research in the Regional Primate Research Centers has led to diagnostic tests that make it possible to identify and isolate animals infected with simian AIDS-related retroviruses and reduce the spread of disease and subsequent mortality. In addition, several new lentiviruses, which may prove important as models for AIDS research, have been identified in monkey species.

Because the Division is the focal point at NIH for assisting grantee institutions in providing proper care and housing for laboratory animals, significant emphasis has been placed on animal welfare issues and on renovation and improvement of animal research facilities. A new report has been prepared at the request of the Senate Appropriations Subcommittee on the current and long-term needs for facilities to house laboratory animals at research institutions. DRR's animal facilities improvement program will be continued in 1988 in an effort to meet those needs.

The Program's resource diagnostic laboratories continue to focus on diseases of laboratory animals--their identification, cure and prevention--and their potential to serve as animal models of human disease as well as on research-generated improvements in animal health.

As a key resource for training in laboratory animal medicine, the Laboratory Animal Sciences Program provides expertise for care of the many species involved, and for managing central animal resources, as well as special assistance to investigators. This year, in response to the new animal welfare requirements of both the Public Health Service and the U.S. Department of Agriculture, it is proposed to give increased emphasis to the preparation of laboratory animal sciences specialists.

The Biological Models and Materials Resources Section (BMMRS) was established in 1985 within the Division of Research Resources to develop and support the use of nonmammalian models in biomedical research. Recently, the Section was assigned leadership in development of the NIH plan required by the Health Research Extension Act of 1985 to develop research methods which: do not require the use of animals; reduce the number of animals used; or produce less pain and distress during experiments. In January, 1987, a new NIH-wide program announcement was issued describing areas in which NIH has interest in receiving grant applications.

The Biomedical Research Support Program consists of the Biomedical Research Support (BRS) formula grant program--which has been proposed for elimination in 1988--the Shared Instrumentation Grant (SIG) Program, and the Minority High School Student Summer Research Apprentice Program. The elimination of the BRS formula grant program has been proposed by the Administration as part of a broader effort that will permit NIH to continue to support 19,000

investigator-initiated research project grants, thus maintaining a balanced program, and at the same time, responding to the public demand for deficit control. The Shared Instrumentation Grant (SIG) Program, provides funds of up to $300,000 for the acquisition of large, sophisticated, state-of-the-art instrumentation costing more than $100,000, for shared use by groups of PHS-funded investigators. Since 1982, the Program has awarded a wide variety of instruments including electron microscopes, mass spectrometers, macromolecular sequencers and synthesizers, cell sorters, nuclear magnetic resonance spectrometers and image analysis systems.

The goal of the Minority High School Student Research Apprentice Program, established in 1980, is to interest minority high school students in biomedical research careers. Since 1980 approximately 5,840 student research assistant positions have been supported, enabling students to spend the summer months participating in varied laboratory research under the preceptorship of established research investigators. Many of these students have gone on to pursue college-level training in the biological sciences.

The Minority Biomedical Research Support (MBRS) Program was established in 1972 to address the low representation of minorities in biomedical research. Institutional grants support the participation of undergraduates, graduate students and faculty in biomedical research at minority colleges, universities and health professional schools, and at other academic institutions with substantial minority enrollments. MBRS grants also provide support for upgrading research instrumentation and for research facilities improvement at minority institutions.

Approximately 7,500 minority students have participated in the MBRS program since 1972. Of the nearly 5,500 students receiving baccalaureate degrees, about 80 percent have been accepted to graduate schools; medical, dental and other health professional schools; and other health-related careers. One hundred and ninety-nine former MBRS students have received Ph.D.s; 95 former MBRS students have been awarded the D.D.S.; and 617 former MBRS students have received the M.D. degree.

As an example of some of the research accomplishments of the MBRS Program, researchers at the Meharry Medical College in Nashville, Tennessee, recently have identified the mechanism by which the organism that causes gonorrhea mutates and becomes resistant to the antibiotic ampicillin, a drug that is often the treatment of choice. These researchers have identified four different spontaneous mutations that can account for resistance of the organism to ampicillin.

Mr. Chairman, our request for Research Resources is $263,324,000. I will be pleased to answer any questions.

Statement of David Rall

Mr. Chairman and Members of the Committee, I am pleased to be with you today to tell you about some of the significant research achievements supported or conducted by the National Institute of Environmental Health Sciences (NIEHS).

When we think of highly polluting industries, we tend to think of the older, so-called smokestack industries such as steel, chemical manufacture, and refining. We assume that the newer industries are somehow exempt from those concerns. This may not be a safe assumption.

In conjunction with the National Institute for Occupational Safety and Health (NIOSH), the Institute is conducting toxicological studies of some new and unusual chemicals which are an important part of the semiconductor industry. Gallium oxide and arsine are being studied because workers in this industry are exposed to a combination of these chemicals. Because a large portion of the work force exposed to these chemicals are women, we have focused our studies initially toward potential health effects in this group. Preliminary results from inhalation studies of arsine gas which show decreased fertility in rats seem confirmed by evidence from a microelectronics plant outside Boston that found a two-fold increase in miscarriages among female workers.

Lead, a well known toxic chemical which has presented an environmental health problem since the days of the Romans, is still with us. It is a ubiquitous contaminant in many of our nation's cities. We now know that even small amounts of lead can affect virtually every human organ system; the brain, nerves, kidneys, blood, and bones. I would like to mention two particularly promising projects which are currently underway.

One is a unique epidemiological study being conducted at our New York University Center. Scientists there have found a strong correlation between blood lead concentration and impairment of intelligence in a study of 42 pairs of twins, where one member of each pair had a history of lead poisoning. By comparing twins, the study minimized the influence of environmental variables other than lead, thus strengthening the evidence linking lead intoxication to adverse effects on intelligence.

Another study is being done in an inner-city neighborhood by the University of Cincinnati. They are trying to discover why the blood levels of some children vary even though their home environments contain the same amount of lead. An understanding of this might shed light on why there is such an individual difference in the susceptibility to toxic chemicals.

Researchers at New York University's (NYU) Institute of Environmental Medicine have initiated a study of elevated levels of radon and radon daughters in groundwater taken from several locations on that part of the Reading Prong that extends into New York state. A natural spring in the area is being studied since its water is consumed by a large group of the local population. The anatomy of this spring, with respect to its content and concentration variability of natural radionuclides as a function of time, is also being investigated in the light of the current

interest in elevated radon levels in homes constructed on the Reading Prong.

Many of our environmental concerns have been triggered by observations in the workplace where the heaviest exposures to industrial chemicals take place. In the early 1970s scientists supported by NIEHS grants played a critical role in alerting society to the possible hazards with BCME, a chemical feedstock. The interest in BCME was piqued by looking at the chemical's structure which resembles other toxic chemicals. When animal studies were conducted, BCME turned out to be a potent carcinogen, causing lung cancer as I have discussed previously before this Committee.

Scientists are continuing to monitor a group of 2,500 chemical workers who were exposed to BCME and its chemical cousin CMME. They have found that depending upon the length and duration of exposure, exposed workers can have as much as seven times greater risk of developing lung cancer as those who are not exposed. This risk continues for as long as 20 years after the exposure has ceased, although the risk does diminish somewhat.

Among the first scientific problems NIEHS faced was characterizing the health effects of dioxins and PCBs, two ubiquitous and toxic chemicals. The more toxic dioxins occur as unwanted contaminents in the production of useful herbicides. Conversely, PCBs were designed and manufactured for a specific purpose, for example, insulating fluids in transformers. In both cases, they end up in the environment as a health threat that was not perceived when they were first introduced.

A major finding of current interest which was initiated by NIEHS scientists is that dioxin in animals can change the ability of the immune system to protect the body from disease. Recently, the Centers for Disease Control reported immune function abnormalities in humans exposed to dioxin contaminated soil at Quail Run, Missouri. It is too early to determine the consequences of this finding but it is noteworthy.

NIEHS is continuing to characterize TCDD and its effects on human health. Our current projects include support of a grantee who has found that a single oral dose of TCDD administered to rats has a significant impact on the production of the male hormone, testosterone, reducing its concentration and causing the seminal vesicle and ventral prostate to atrophy. In other studies an NIEHS supported scientist is cloning the TCDD receptor, the part of the cell to which the TCDD molecule attaches, and developing an inexpensive test which can quickly identify whether people have been exposed to dioxins.

I would like now to move from a chemical-effects orientation to a disease orientation. Several years ago, an outbreak of a strange neurological disorder in young patients that closely resembled Parkinson's disease was traced to a contaminant in "synthetic heroin," MPTP. Since 1984, the NIEHS has been supporting work on an MPTP model of Parkinson's disease which has produced exciting results. The production of the MPTP-induced condition in animals now permits a range of experimental studies never before possible, including studies of the mechanisms involved in Parkinson's disease as well as new approaches to therapy. These

recent data also add support to the increasingly popular theory that natural Parkinson's disease may be caused by some kind of environmental toxin. The idea of environmental toxins is beginning to be explored for other neurodegenerative disorders, and we can look forward to exciting new developments in this area.

About 15 years ago, it was suggested that a vital early event in the development of an atherosclerotic plaque involved a virus or other environ mental agent triggering a specific gene to produce multiple, identical copies of itself. Recently this hypothesis was supported when researchers showed that DNA from human atherosclerotic plaques acts like an "oncogene" in inducing changes in cultured cells. This process is similar to the manner in which oncogenes act in formation of tumors. This link between plaque formation and tumor formation may have far-reaching implications, not only for the study of atherosclerosis, but also its control and prevention.

Having provided examples of research into the effects of specific environmental agents, I would like, in closing, to tell the Committee about four projects which are aimed at improving research methodology.

While there is a continuing need for the use of animals in environmental health research, the NIEHS has become the leader in developing and evaluating a host of alternative test systems which do not use whole animals. They can be conducted in months or days rather than years and often at a cost of a few thousand dollars rather than hundreds of thousands of dollars. The NIEHS is committed to pursue this goal. With approximately 60,000 chemicals in commerce, and so few adequately tested, the challenge is great. It is hoped that these short-term tests can narrow this gap. However, I want to emphasize that short-term tests are not a panacea. Short-term tests are very good at telling us that a chemical can cause various genetic mutations or other cellular damage. While we believe these biological events are preliminary to the development of cancer, we do not yet know how these different cellular events fit together and animals will still be required for the foreseeable future to answer these more complex questions.

Over the past year NIEHS has conducted a study comparing 73 chemicals which have been tested by the NTP for carcinogenesis in mice and rats to the results from four short-term tests. The results so far indicate that the Salmonella system, one of the fastest and least costly short-term systems, is comparable to three other in vitro tests in terms of predictability and reproducibility. If these results are substantiated by further evaluation, it is possible that the use of batteries of in vitro tests can be abandoned in favor of a combination of one in vitro system used with a short-term in vivo endpoint.

At the Massachusetts Institute of Technology scientists are studying ways to monitor exposure to environmental chemicals in humans. They have been able to detect amines--a class of powerful cancer-causing chemicals--that are bound to human hemoglobin. They have also detected fungal toxins in blood DNA. They hope to develop the ability to see the genetic fingerprints of chemicals in the genes of blood cells where they form unique patterns. If this proves possible, it will offer a direct, accurate way of measuring environmental exposure, often the weak link in risk assessments.

Researchers at NIEHS have investigated new techniques for detecting chemical damage to DNA occurring in vivo in humans. Assays of specimens of human placenta demonstrated the presence of seven different chemical addition products (adducts) to DNA. Three of these adducts were strongly associated with maternal smoking during pregnancy. Results suggest that even at their current formative stage of development, assays for DNA adducts may help identify determinants of DNA damage to human tissues and improve our ability to demonstrate dose response relationships.

Finally, NIEHS scientists are conducting a broad research program focused on oncogenes, which are derived from components of the normal genome that can be turned on by various chemicals to initiate cancer. Activated oncogenes in chemically induced and spontaneously occurring rodent tumors are examined and compared to determine the mechanism by which chemical exposure causes an increased incidence of neoplasia. Results obtained provide a basis for the analysis of activated oncogenes, particularly in the mouse liver and lung, that should in turn generate information at the molecular level that will aid in the use of rodent carcinogenesis data for human risk assessment.

The new biotechnologies may well help resolve or reduce some of the important uncertainties associated with the identification and characterization of human environmental health hazards. These include the use of high dose animal data to estimate the corresponding effects at levels more typical of human exposure and in the extrapolation of laboratory results across species to humans. Today, dose response determination and human risk estimation--both of which are central to the development of effective public health protection--are often based on a mixture of scientific facts, assumptions and policy decisions. But tomorrow, more exact answers primarily or entirely based on sound science may be possible.

Mr. Chairman, the FY 1988 budget request for this institute is $239,878,000. In addition, the Administration also proposes a policy of appropriating the total NIH allowance for research project grant commitments at the time that they are incurred. This approach to grant funding would inform the research community of the total funds available for continuation costs. In accordance with this proposal, the FY 1988 request includes $41,447,000 for future year commitments associated with competing project grants awarded in FY 1988. I will be pleased to answer any questions you might have.

Biography of David Rall

August 3, 1926. Aurora, Illinois

Education: B.S., North Central College, 1946; M.S. (Pharmacology), Northwestern University, 1948; M.D., Northwestern University School of Medicine, 1951; Ph.D. (Pharmacology), Northwestern University, 1951.

Professional History: 1952-53, Intern, Bellevue Hospital. 1953-58, Scientist, Laboratory of Chemical Pharmacology, National Cancer Institute. 1958-63, Head, Clinical Pharmacology and

Experimental Therapeutics Service, General Medicine Branch, National Cancer Institute. 1963-69, Chief, Laboratory of Chemical Pharmacology, National Cancer Institute. 1966-71, Associate Scientific Director for Experimental Therapeutics, National Cancer Institute. 1971-present, Assistant Surgeon General, USPHS.

Professional Organizations: American Association for the Advancement of Science, American Association for Cancer Research, American Public Health Association, American Society for Clinical Investigation, American Society for Pharmacology and Experimental Therapeutics, Society for Occupational and Environmental Health, Society for Risk Analysis, Society of Toxicology.

Honors, Awards: Editorial Board, Proceedings of the Society for Experimental Biology and Medicine, 1962-65. Member, National Institutes of Health Chemotherapy Study Section, 1965-67. PHS Meritorious Service Medal, 1966. Chairman, National Institute of General Medical Science Pharmacology Toxicology Review Committee, 1967-69. Editorial Board, Pharmacological Reviews, 1969-72. Chairman, DHEW Departmental Committee on Drug Research and Regulations, 1970. Associate Editor, Cancer Research, 1970-74. Chairman, OST-CEQ Ad Hoc Committee on Environmental Health Research, 1971-72. Adjunct Professor, University of North Carolina, Chapel Hill, 1972-present. US Coordinator, Environmental Health Program, US-USSR Health Exchange Agreement, 1972-present. Chairman, DHHS Committee to Coordinate Environmental and Related Programs, 1973-1985. Editorial Board, Archives of Environmental Health, 1973-76. Associate Editor, Journal of Toxicology and Environmental Health, 1974-78. DHEW Distinguished Service Medal, 1975. Member, DHEW Secretary's Review Panel on New Drug Regulation, 1975-76. Member, NAS Safe Drinking Water Committee, 1975-1977. Chairman, Committee on Health and Environmental Effects of Increased Coal Utilization, 1977-78. Member, Institute of Medicine, 1979-present. Editorial Board, American Journal of Industrial Medicine, 1980-present. Member, WHO Programme Advisory Committee, 1980-present; Chairman, 1980-81. Editorial Board, Risk Analysis, 1981-present. Editorial Board, Regulatory Toxicology and Pharmacology, 1981-present. Arnold J. Lehman Award, Society of Toxicology, 1983. Member, US Delegation to the US-Japan Cooperative Medical Science Program Committee, 1984-present. Member, Committee on Council Affairs, American Association for the Advancement of Science, 1986-88.

Statement of Donald Lindberg

Mr. Chairman, the year 1986 was a special milestone in the history of the National Library of Medicine. It was our Sesquicentennial, a year when the Library's staff could look back on 150 years of service to American medicine and to the public and also a year in which NLM and the biomedical community converged on a plan for future direction.

With the assistance of our Board of Regents and the new Friends of the National Library of Medicine organization, millions of Americans were made aware of the Library services to medical scientists, educators, and health care practitioners. NLM services are an integral part of the research process. Without them many of the advances in biomedical research would not have

materialized. In addition, as a couple of examples make clear, rapid access to our databases also can make a critical difference in patient care and in serving larger public health concerns.

One episode took place in St. Louis: a baseball field was struck by lightning and 3 boys were in the emergency room, one in critical condition. The medical resident rushed to the hospital's library, seeking information on burns and heart damage due to lightning injuries. Within minutes a computerized search of MEDLINE was performed. Four articles from journals in the hospital library's collection were identified and proved to be of great help in treating the children. In our own area of Washington, D.C., just last November, a large tractor-trailer carrying a variety of chemicals was involved in an accident on Interstate 95 near Columbia, Maryland. The emergency response team called to the scene of the accident connected into the NLM hazardous substances data bank. The information retrieved was credited with averting a major explosion and fire with the potential release of toxic fumes.

There have been a number of such reported experiences, Mr. Chairman. Some of these involve dramatic situations of life and death, others demonstrate that rapid retrieval of current, authoritative information can alter the form of treatment being provided, thus improving health care and, in many instances, helping to hold down the rapidly rising costs of health care.

Our Sesquicentennial gave us the opportunity not only to reflect on our distinguished history and current programs, but to prepare ourselves for the future. The Library's Board of Regents, with the assistance of many distinguished outside advisers, has formulated a thorough plan to guide the Library's activities over the next several decades. This plan was approved at the January, 1987 Board meeting, and many of the recommendations in the plan are reflected in the program descriptions that follow.

A major initiative of the Library, is the development of a Unified Medical Language System (UMLS). UMLS seeks a solution to the lack of a practical language system that would permit communication between the many and varied health information systems. Investigators at six universities are participating in four two-year contracts, funded by the Lister Hill Center program, to support UMLS development. The American Medical Association is also actively involved in this important project. Essential to any such integrating system is a way for the individual physician or scientist to dial directly into NLM's services. GRATEFUL MED, a new user-friendly microcomputer system, has been developed by NLM for this purpose. GRATEFUL MED has proven to be extremely popular, with 3,300 users acquiring the software since it became available less than a year ago. While the achievement of the ultimate goal of a Unified Medical Language System is far in the future, the early steps in the process should have immediate payoffs in better information service to health care practitioners, administrators, researchers, and educators.

One example of a beneficiary of a Unified Medical Language System is another NLM-supported program, Integrated Academic Information Management Systems (IAIMS). The IAIMS concept is to use computer and communications technologies to create systems in

academic health centers that integrate a variety of information in support of health research, education, patient care, and management. The IAIMS program is a three phase effort to plan, develop and implement such prototype systems at a small number of outstanding American medical centers, to serve as models for others.

Medical informatics is the study of biomedical information, data, and knowledge--their storage, retrieval, and optimal use for problem solving and decision-making. The emergence of medical informatics as a new discipline is due not only to advances in technology, but to the awareness that knowledge is becoming unmanageable by traditional paper-based methods, and to a growing conviction that the process of decision-making is as important as the factual base on which clinical decisions or research plans are made.

Processing information faster or more efficiently--which today's technology can easily accomplish--is not sufficient. NLM's awards in medical informatics research support the development of new and more powerful information management tools. These include frameworks for organizing and encoding medical knowledge; methods for acquiring and representing judgmental knowledge that is based on medical experience rather than formal studies; and systems to provide customized, expert advice to practitioners. To assure an adequate supply of highly trained investigators in this important discipline, NLM has doubled its support for research trainees in medical informatics in 1987.

Acquiring, organizing, disseminating, and preserving the world's biomedical literature is NLM's primary mission. In FY 1986 NLM acquired approximately 27,000 books and audiovisual programs, 125,000 serial issues representing 23,000 individual titles, and 144,000 modern manuscript items. The literature acquired by the Library must be preserved to ensure that it will be available to future scientists and historians. Accordingly, in 1985 NLM adopted a preservation plan, and began to implement several of its recommendations in 1986, including: establishment of a Preservation Section, increased preservation microfilming, and encouraging biomedical publishers to use permanent (acid-free) paper in their publications.

In FY 1986, the Library cataloged about 20,000 books, journals and audiovisual programs and indexed approximately 316,000 journal articles. These bibliographic records were published in the Library's catalogs and in Index Medicus, and added to NLM's computerized bibliographic databases. With holdings of some 3.7 million items in 70 languages and information exchange capabilities internationally, the Library is a source for all health professionals. Material may be consulted at the Library, borrowed through interlibrary loan, and searched by means of NLM's computerized online databases. More than 4 million journal articles, books, and computerized information searches were provided by NLM in 1986.

MEDLARS is the Library's widely used bibliographic system for storing and retrieving the biomedical literature. It consists of more than 5 million references and abstracts available to health care professionals nationwide, helping them in minutes to locate

medical information. MEDLINE, the largest and most widely used of NLM's online databases is used daily by an international network of 8,000 subscribing users—both institutions and individual health professionals. MEDLARS is also used to prepare for printing the 1,500-page monthly bibliography, Index Medicus, which the Library has published since 1879. The Library has signed collaborative agreements with ten private sector firms to create and test videodisc versions of MEDLINE. This effort represents but one example of NLM's policy to improve distribution of biomedical information by building constructive relationships with information producers and vendors in the private sector.

NLM supports the U.S. Regional Medical Library (RML) network of over 4,000 institutional members that, among various dissemination activities, processes over 2 million interlibrary loans per year. Aiding in this effort is DOCLINE, NLM's new automated document request and routing system. DOCLINE identifies which health science libraries in the RML network own various journals, and requests for articles from these journals are routed to those libraries automatically.

The Lister Hill National Center for Biomedical Communications (LHNCBC), is the intramural research and development component of the Library and is responsible for exploring the application of advances made in the fields of computer and communications technology to health information handling, processing and transfer problems, and to health sciences education. As an example of projects currently underway, staff have developed the AI/RHEUM consultant system in rheumatology, one of the world's largest medical artificial intelligence systems. AI/RHEUM has been tested with more than 500 cases: the results agree with a consensus diagnosis of rheumatologists in more than 90 percent of these cases. During 1987, this system is scheduled for evaluation through field testing in a number of sites throughout the country.

Biotechnology is recognized by the Long Range Plan as a "window of opportunity" for NLM. Not only is it an area of great scientific importance, but it is an area that would benefit greatly by intensive application of automated information systems. NIH, which has been a prime funder of the whole field of molecular biology, has also supported the beginnings of essential automated information services both at NIH and at university and other laboratories. For example, since 1981, NLM has supported the electronic creation of the milestone textbook, Mendelian Inheritance in Man, by Professor Victor McKusick at Johns Hopkins University. The Hughes Medical Research Institute also supports electronic communication between critically important university laboratories for molecular biology and genetics.

In the area of biotechnology, NLM is now concentrating on two major efforts. The first is to participate actively on the NIH coordinating committee which is coordinating NIH support for biotechnology information resources. Second, NLM, through the Lister Hill Center, is making great progress in changing our own MEDLINE and other systems so that scientists can use the numerous relevant computer databases altogether and at once, just as one can set out a number of books and maps on a table. In other words, NLM is trying to make the several computer database systems, and our own, work well together.

For years, NLM has indexed articles containing nucleic acid sequences. In fact, approximately 97% of all published research articles containing DNA sequences are already contained in NLM's MEDLINE system. NLM is exploring solutions to the problem that sequence data are being generated faster than they can be incorporated into searchable databases. Currently, the GenBank, Protein Identification Resource and a subset of MEDLINE for molecular genetics have been mounted for test searching by NIH scientists with software developed by the Library's Lister Hill Center.

The Toxicology Information Program develops and maintains specialized online databases on drugs and chemicals toxic to man. It collects and organizes toxicology data from the files of collaborating organizations, prepares and publishes bibliographies and reports, and operates online files. As my earlier example of the toxic spill on I-95 illustrates, rapid access to accurate data on toxic compounds is critically important. The Library continues to improve and update its toxicological information services so that when an emergency occurs, the latest and best information is available to those in need.

In conclusion, the outpouring of knowledge from the Nation's medical laboratories would be of limited value if it were not for NLM's function of classifying, announcing, and distributing. In order to keep pace with the inexorable growth of scientific knowledge, NLM invests its fiscal and intellectual resources not only in acquiring this information, but in devising new and more efficient methods for making it available to the health science community.

With the aid of the Board of Regents' long-range plan, I am confident that the Library will meet successfully the information challenges of the future and continue its tradition of excellence.

Mr. Chairman, the request for the National Library of Medicine for FY 1988 is $64,399,000. I shall be pleased to answer questions and supply additional information for the record.

Biography of Donald Lindberg

September 21, 1933. New York, New York

Education: A.B., Biology, Amherst College, magna cum laude, 1954; M.D., College of Physicians and Surgeons; Columbia University, 1958; Sc.D., Amherst College, (hon. caus.) 1979.

Professional History: 1984-present, Director, National Library of Medicine; 1971-1984, Director, Information Science Group, University of Missouri School of Medicine; 1969-1984, Professor of Pathology, University of Missouri School of Medicine; 1976-1980, Director, Health Services Research Center with Special Emphasis Health Care Technology Center, University of Missouri-Columbia; 1972-1973, Consultant for Health Sciences to Vice President for Academic Affairs; 1969-1971, Professor and Chairman, Department of Information Science, University of Missouri School of Library and Information Science; 1970-1971, Staff, Vice President for Academic Affairs, University of Missouri; 1967-1970, Director, Regional

Medical Program Information Systems; 1968-1970, Staff, Executive Director for Health Affairs, University of Missouri; 1962-1970, Director, Medical Center Computer Program, University of Missouri; 1967-1969, Director, Missouri Regional Automated Electrocardiography System; 1966-1969, Associate Professor of Pathology, University of Missouri School of Medicine; 1963-1966, Assistant Professor of Pathology University of Missouri School of Medicine; 1962-1963, Instructor in Pathology, University of Missouri School of Medicine; 1960-1963, Director, Diagnostic Microbiology Laboratory, University of Missouri Medical Center; 1960-1962, Resident Physician in Pathology, University of Missouri School of Medicine; 1959-1960, Assistant Resident in Pathology, Columbia-Presbyterian Medical Center; 1958-1960, Assistant in Pathology, Columbia University College of Physicians and Surgeons; 1958-1959, Intern in Pathology, Columbia-Presbyterian Medical Center; June 1955-Sept. 1955, June 1954-Sept. 1954, Research Assistant to Dr. O.E. Schotte, Amherst College.

Honors: Phi Beta Kappa; Simpson Fellow of Amherst College (1954-55); Markle Scholar in Academic Medicine (1964-69); member, Institute of Medicine, National Academy of Sciences (1985); Silver Core Award, International Federation for Information Processing (1986).

Professional Memberships: Sigma Xi; American Society of Clinical Pathologists; College of American Pathologists (Telecommunication Network Committee, Committee on Emerging Technology); Missouri State Medical Association; American Association for Advancement of Science; Association for Computing Machines (SIGBIO); Salutis Unitas; American Association for Medical Systems and Informatics, Board of Directors; Symposium on Computer Applications in Medical Care, Board of Directors; National Board of Medical Examiners, Board Member; Washington Society for the History of Medicine; Editor: Information Methods in Medicine, Lecture Notes in Medical Informatics, and Journal of Medical Systems; National Academy of Practice in Medicine Distinguished Practitioner; Computer Science and Engineering Board, Institute of Medicine, National Academy of Science (1971-1974); U.S. Representative to International Medical Informatics Association, and Trustee (1975-1984).

Statement of Doris Merritt

It is a privilege for me to make the first National Center for Nursing Research (NCNR) presentation to this committee to discuss the progress, the programs, and the promise of the National Center for Nursing Research at the National Institutes of Health.

I would just like to address the programs of the Center. The Center was established on April 18, 1986 by HHS Secretary Otis R. Bowen, M.D., soon after the passage of the Health Extension Act of 1985. Two months later, the personnel, the budget, and the grant portfolio of the nursing research section of the Health Resources and Services Administration's Division of Nursing (HRSA/DN) were transferred to NIH. With impressive support from the NIH Director and many others, the Center was able to obligated its entire appropriation. In total, NCNR made 109 research and 165 training awards by September 30, 1986. The National Advisory Council to the

NCNR was appointed and convened on February 17 and 18, 1987. The nomination of an NCNR Director has been forwarded to Secretary Bowen.

Nursing research is multidisciplinary; it encompasses studies relevant to individual responsibility for wellness and the diagnosis, treatment, and prevention of disease. It includes both the scientific inquiry into fundamental biomedical and behavioral processes relevant to nursing and study of the applications of nursing interventions in patient care.

Initial steps to enrich the research training of top caliber nurse scientists have been taken to assure that properly prepared nurse investigators will contribute their unique point of view to health care. NCNR has initiated career development awards for the growing number of nurse scientists and is emphasizing individual postdoctoral training opportunities in established NIH supported research and demonstration centers. To augment the continuing development of centers of excellence in nursing research, NCNR will provide institutional research training opportunities for both pre- and postdoctoral trainees. The NCNR will give priority to investigator-initiated research in new and emerging high priority areas: support of health promoting behaviors, emphasis on disease prevention, the care of an aging population, coping with iatrogenic effects secondary to necessary and life saving therapies, alternative measures of providing nursing interventions for patients and families of individuals with AIDS and Alzheimers disease, and the ethics of decision making in therapeutic choices.

The fruition of a national program of this scope and importance will not occur instantaneously. Methodically and with careful attention, the Center, with the advice of its Council and the nursing research community, will act to accelerate the definition and shape of the future of nursing science and the articulation of a national research plan.

The current research activities supported by the NCNR reflect, in large part, the inherited research philosophy of the Division of Nursing. While continuing to explore the social and behavioral parameters of good health, the Center is beginning to incorporate NIH standards in the search for the biochemical and physiological bases of care. Nursing science will evolve and mature as a complement to the traditional biomedical sciences. Selected accomplishments of the program areas, which demonstrate the added dimension of the nursing perspective to total health care, are highlighted in the following examples.

Patients with severe hypoxemia - low oxygen levels - due to chronic obstructive pulmonary disease (COPD), require home oxygen use to prevent hospitalization and assure survival. One NCNR investigator is comparing the use of transtracheal oxygen delivery - a small catheter inserted directly into the trachea - with transnasal delivery - a catheter inserted and fixed in the nostril - to see which mode of oxygen delivery will reduce the incidence and frequency of complications, deleterious psychological effects of dependency, and relative costs. Preliminary results suggest that transtracheal oxygen delivery can decrease oxygen requirements, increase exercise tolerance, and contribute to greater patient acceptance of continuous oxygen use.

Another NCNR study concerns patients with chronic obstructive pulmonary disease and limited exercise tolerance which reduces their ability to manage the activities of daily living. Research on the potential for inspiratory muscle training as a way to improve the functional status of patients with COPD is being conducted to demonstrate which patients will benefit from this training, i.e., those with mild, moderate, or severe airway obstruction.

Urinary incontinence (UI) not only causes significant disability and dependency among the elderly, it is estimated to be one of the three most important factors in a family's decision to place a person in a nursing home. As much as $1.5 billion per year has been estimated as the economic impact of caring for UI patients in nursing homes alone. NCNR is participating with the National Institute on Aging in funding five cooperative agreements whose investigators are testing the effectiveness of non-invasive therapies of UI in elderly persons. The studies involve outpatients in nurse supervised clinics and inpatients in long-term care facilities. Interventions include bladder training, prompted voiding, biofeedback, and physiologically designed patient exercises for better control of urination.

Diabetes mellitus affects individuals of all ages, is expensive to manage, and has serious complications - for example, cardiovascular disease, kidney dysfunction, and blindness - that are costly in both human and financial terms. One NCNR supported investigator is studying how diabetics with insulin-dependent diabetes mellitus (IDDM) respond to their disease. While IDDM is not curable, it is controllable through a combination of insulin use, diet, and exercise. The study will reveal what factors most influence an individual's willingness and ability to adhere to control regimens. The results will be used as the basis for the development of interventions, in which the nurse practitioner will play a significant role, not only with regard to IDDM, but for other chronic diseases as well.

Another NCNR supported study involves individuals with non-insulin dependent diabetes mellitus (NIDDM). Particularly in the obese patient, effective control of blood sugar levels and maintenance of appropriate weight requires significant changes in eating, exercise, and other personal habits. Instructions from attending health professionals may be ignored or haphazardly followed. The use of a self-management strategy which may help overweight adults with NIDDM improve their compliance with dietary instructions is being tested.

Although NCNR has no AIDS-related grants in its portfolio, it is an area of major importance to which nursing research can make a major contribution in the essential areas of prevention, acute and chronic care, and support of individuals and families coping with personal disaster. In recognition of the intensive nursing care required for these patients, the NCNR is encouraging research which assesses the health effects of various nursing interventions at various stages of the illness and in various settings, for example, hospital, home, hospice; the cost effectiveness of these interventions; the etiology of AIDS including identification of predictive factors; ethical issues related to diagnosis and treatment strategies; and public policy questions concerning AIDS and the AIDS patient. To this end, NCNR has recently published a program announcement and plans to make some initial awards in late FY 1987.

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The potpourri of examples of nursing research reinforces the difficulty of finding a single suitable definition. These examples also point to the promise Nursing research offers in broading aspects of Scientific exploration. The NCNR has attempted to distill the intent revealed in Congressional language into its organization and program delineation. The insights of the nurse scientist will be brought to focus on activities designed to improve health promotion, disease prevention, and the provision of acute and chronic care. This will be accomplished through a better understanding of the science underlying nursing interventions and systems of providing health care in an efficient, effective, and economical fashion.

Mr. Chairman, the FY 1988 budget request for this institute is $24,866,000. In addition, the Administration also proposes a policy of appropriating the total NIH allowance for research project grant commitments at the time that they are incurred. This approach to grant funding would inform the research community of the total funds available for continuation costs. In accordance with this proposal, the FY 1988 request includes $8,733,000 for future year commitments associated with competing project grants awarded in FY 1988. I will be pleased to answer any questions you might have.

Biography of Doris Merritt

July 16, 1923, New York City, New York

Education: B.A., cum laude, Hunter College of the University of the City of New York, 1944. M.D. George Washington University (GWU) School of Medicine, 1952.

Professional History: 1952-53, Internship, Pediatrics, Duke University Hospital, Durham, NC. 1953-54, Research Fellow, GWU School of Medicine, Washington, DC. 1954-56, Assistant Resident, Research Fellow, Pediatrics, Duke University Hospital, Durham, NC. 1956-57, Instructor, Pediatrics, Duke University School of Medicine, Director, Pediatric Cardiorenal Clinic, Duke University Hospital, Durham, NC. 1957-60, Executive Secretary, Cardiovascular and General Medicine Study Sections, Division of Research Grants, NIH. 1961-62, Director, Medical Research Grants and Contracts, Indiana University School of Medicine (IUSM). Medical Research, Indiana University School of Medicine. 1965-67, Assistant Dean for Research, Office of the Vice President for Research and Dean of Advanced Studies, Indiana University (IU). 1965-68, Director of Sponsored Programs and Assistant to the Provost, IU Medical Center. 1967-71, Associate Dean for Research and Advanced Studies, Office of the Vice President, and Dean for Research and Advanced Studies, IU. 1968-73, Associate Professor of Pediatrics, IUSM. 1968-77, Director, Office of Sponsored Programs, Indiana University-Purdue University at Indianapolis (IUPUI). 1971-79, Dean, Research and Sponsored Programs, IUPUI. 1973080, Professor of Pediatrics, IUSM. 1978 to present, Special Assistant to the Director, NIH. 1980 to present, acting Director, National Center for Nursing Research, NIH.

Professional Organizations: American Academy of Pediatrics (Fellow); American Association for the Advancement of Science; National Council of University Research Administrators.

Selected Committee Memberships
Community: 1969-76, Member of Regional Advisory Group, Indiana Regional Medical Program (Executive Committee). 1970-78, Scientific Advisory Board, Indianapolis Center for Advanced Research. 1972-74, Member of Board and Executive Committee, Community Addiction Services Agency, Inc. 1973-77, Director, Indianapolis Comprehensive Sickle Cell Center. 1977-78, Marian College Board of Trustees. Federal: 1970-74, Chairman, NLM Biomedical Communications Review Committee. 1975-80, Consultant and Member Board of Regents, NLM. Other National: 1975-76, Member, NAS:NRC Assembly of Life Sciences Committee on Maternal and Child Health Research. 1983, Co-chairperson PHS Task Force on Women's Health Issues.

Honors, Awards: 1977, Alumni Hall of Fame, Hunter College, University of the City of New York. 1985, National Institutes of Health Director's Award.

National Institute of Neurological and Communicative Disorders and Stroke

Dr. Goldstein. Thank you, Mr. Chairman. This Institute is primarily concerned with research on the brain and nervous system with particular emphasis on stroke and the communicative disorders; the latter are the disorders of hearing, language, and speech. Our research program for 30 years has focused principally on basic research because we felt we had to rewrite the textbooks on how modern biology explains brain function. We are fairly close to the accomplishment of that task, although we are not quite finished.

We are now, in addition, focusing our attention on clinical research, namely how to deal with brain diseases and spinal disorders, and it is that area in which we would hope to give additional emphasis in this coming year. I trust my written statement adequately describes our goals and plans.

I would be happy to answer any questions.

RESEARCH BREAKTHROUGHS

Senator Chiles. Are there any breakthroughs or things that you have come up with recently which might be of interest?

Dr. Goldstein. Yes, sir; one of the most important medical problems of our Nation is that of what to do when the brain and nervous system are damaged due to trauma or disease. It was thought in the past that central nervous system damage was permanent and that function could never be restored to the patient who has had a stroke or a brain tumor or a spinal cord injury. We now know that attitude is really quite wrong, and, in fact, it may be possible to restore function to the damaged brain and spinal cord.

The Institute is supporting a very active research program in these areas, including the implant of tissue in the brain and the regeneration of damaged spinal cords. These are yet only research objectives. They are not yet accomplishments.

Senator CHILES. We thought the brain would not regenerate itself, or I am saying what I thought used to be. Sometimes one lobe would take over functions of another. You would cross over things like that. Now do we think that there is actually such a thing as restoration?

Dr. GOLDSTEIN. Yes; we have definite evidence of restoration of brain function in animals. One technique is a method in which neurological tissue is taken from another animal and implanted in the brain in the area where destruction has occurred. We now know that the implanted neurological tissue will live there, will grow there, and under certain conditions will take over the function that had been lost.

In this country we have not done those experiments in humans, although this has been done abroad.

Senator CHILES. What?

Dr. GOLDSTEIN. We have not done this research on humans in this country, only in animals.

Senator CHILES. But there has been research in humans?

Dr. GOLDSTEIN. That is correct, in Mexico and in Sweden. In our country, we have restricted it at this time to research in animals such as rats, cats, and primates.

Senator CHILES. The tissue that we are implanting there, that is brain tissue from the same sort of area?

Dr. GOLDSTEIN. There are two kinds of tissues that have been implanted. In the classical experiment, we have used tissue from the adrenal gland, the gland above the kidney. Part of that adrenal gland produces a material, a neurotransmitter substance which the brain also produces. For a patient who has Parkinson's disease, the shaking palsy, the experiment has included taking adrenal gland tissue and implanting it into the brain in order to replace tissue producing the missing neurotransmitter.

In animals, this has been very successful. In man, it is marginal. We do not yet know why. In animal experiments we have also been able to use the tissue from the brain of embryos of an animal, in other words newly developing tissue. I think you can see the problem we must face if and when we approach the issue in man. Where would we get the brain tissue to implant? One possibility is we may grow it ourselves. We may have brain tissue in banks the same way we have blood banks.

BRAIN TRANSPLANTS

Senator CHILES. I guess you could have brain tissue transplants as we do with ordinary transplants.

Dr. GOLDSTEIN. Exactly, sir, and this is the direction that research is now exploring in several centers around the country. Also, this research is being done in the Institute's laboratory at the NIH. It has been a fairly small endeavor in our laboratory, but we are expecting to increase the scope of the program.

Senator CHILES. Do you have any idea when we would start with humans?

Dr. GOLDSTEIN. I can better answer that question in July. We are sponsoring a workshop this summer on that subject. The conference will bring together the best scientists in this country and from overseas to explore what has been done and what are the problems. Finally, we will discuss whether we are satisfied that the animal data are sufficient to involve human subjects.

My own guess is it will be 2 to 5 years before human research is done in this country. I hope I am wrong. I wish it could be sooner, but there are still a number of questions we need to ask from the animal research before we are ready to explore the procedure in humans.

Senator CHILES. We will be interested in this.

Senator Weicker, we are talking about being able to restore the brain, and it is something I have a great deal of interest in.

Senator WEICKER. All 100 members of the U.S. Senate should be interested in this. [Laughter.]

STROKE

Senator CHILES. What about stroke?

Dr. GOLDSTEIN. Stroke is one of our major research areas of emphasis. We are focusing on what occurs inside the brain within those first critical 4 hours during the progression of the acute stroke episode.

Up until the present time, we have had amazing results in the prevention of stroke primarily because of advances that have been made in the Heart Institute in hypertension control and in our Institute in the detection and treatment of the TIA, the transient ischemic attack. We are now focusing on that critical first 4 hours of the stroke and on what happens to the brain cell when it is deprived of oxygen and glucose. The issue is what can we do to protect the brain during this critical period of time when the cell either lives or dies.

We are now planning clinical trials which will evaluate new methods to protect the brain of patients during the acute stroke episode.

Senator CHILES. We will go to the next institute of arthritis and skin diseases.

NATIONAL INSTITUTE OF ARTHRITIS AND MUSCULOSKELETAL AND SKIN DISEASES

Dr. SHULMAN. Mr. Chairman, it is a great privilege for me to appear before you on behalf of the young Institute, the National Institute of Arthritis and Musculoskeletal and Skin Diseases created just last year.

Senator CHILES. I congratulate you on your inception.

Dr. SHULMAN. Thank you. I would like to briefly bring you up to date on developments within the new Institute and some selected scientific advances this year. The Institute is coming together nicely, sir. We have a new National Advisory Council. The Secretary appointed first rate scientists representative of various fields.

The Secretary also appointed new members to the National Arthritis Advisory Board, strengthening it in the fields of orthopedics, skin diseases, and sports medicine.

As our first major event, we organized with the Board a major conference on "Molecular Biology: Its Potential For Advancing Rheumatology Research." This was held at the clinical center in October and was our first contribution to the NIH centennial. Scientific experts in modern biotechnologies brought recent advances in molecular biology to the attention of over 350 researchers in rheumatology. This will have a major impact on research in this field.

It has already had a major impact during this past year on rheumatoid arthritis which, as you know, is a major crippler among the forms of arthritis. Using the approach of restriction fragment length polymorphism, scientists have discovered two DNA fragments that pinpoint the sites on the human chromosome where the susceptibility to rheumatoid arthritis resides. In a second research advance, other investigators have succeeded in cloning the gene for rheumatoid factor.

Turning to osteoporosis, which as you know is the major underlying cause of bone fractures in postmenopausal women and in the elderly, 24 million of us have it; these are the latest figures. Our Institute is targeting research on osteoporosis in several different ways. We, working together with the Aging and the Diabetes Institutes, planned and sponsored, along with the new National Osteoporosis Foundation, a major scientific workshop on "Research Directions in Osteoporosis." It was held just last month at the clinical center. This is our second centennial event. It was successful. Over 700 scientists attended the workshop. It generated a large list of recommendations for future research. You may have seen some articles in the newspaper last month on this workshop. I briefly want to summarize the workshop for you.

First is that the value of estrogen replacement for osteoporosis in postmenopausal women was confirmed. It showed that calcium cannot substitute for estrogen in these women. However, the group confirmed prior recommendations for calcium intake and that special attention should be given for calcium needs and intake for the young and the old.

An important theme of the workshop is that there are numerous other factors that are also important in osteoporosis; it is important as to who you are and what you do. At 35 years of age we develop our peak bone mass. That is the most bone we ever have. At that time in life, blacks have 10 percent more bone than whites; men have 10 percent more bone than women.

Sedentary lifestyle gives you smaller, weaker bones. It is better to do your exercise, which can help, against gravity; that is, it is better to walk than to swim, but do not do it in space because our astronauts lost calcium and bone when they were up there in space.

Fat folks have more bone than thin folks. That is one of the few advantages of being fat. From 35 years on, we all lose bone, so there is a clear aging phenomenon. Heavy smoking is a risk factor. Alcohol is bad for your bones, as well as for everything else. Drugs such as cortisone for your arthritis are bad for your bones.

The challenge that we have either to prevent or to treat this disorder is to find agents or substances that will stop the osteoclasts from destroying our bone, and/or will stimulate osteoblasts, the cells that make new bone, to do so.

Another high priority in our Institute is research on lupus. We do not have enough time to go into that, but we have some research advances in that area. Similarly, we have some very distinct advances in epidermolysis bullosa, EB, which is a terrible, tragic blistering disease of children which we have discussed with you in the past. There are new advances here. We also have many significant advances in immunology of the skin.

Getting back to the new Institute, we are doing our best to meet the many mandates of the legislation for the new Institute. The first of these is to develop a plan for a new national program to expand, intensify, and coordinate research on the causes and prevention of arthritis and musculoskeletal and skin diseases, primarily through basic research and also some applied research. We welcome this special opportunity to develop this new comprehensive plan.

We will also develop plans for our intramural program which, as you mandated last year, we should develop after the permanent Director's appointment. It is in your language from last year. I was appointed in January; so we have 1 year to accomplish that.

We are actively recruiting essential staff to administer the Institute. Mr. Chairman, I would like you to know that we have received nothing but support, encouragement, and help from Dr. Wyngaarden and his entire staff, and also from the leaders and staff of other institutes as we begin to set up this new Institute. I wish to thank each and every one of them for their help.

Mr. Chairman, may I please submit my written statement for the record?

Senator CHILES. All your written statements will be in the record.

Dr. SHULMAN. You know what the budget is. I do not need to go into that. I will be happy to do my best to respond to your questions.

Senator CHILES. Thank you very much.

Next we will hear from Dr. Alexander of the National Institute of Child Health and Human Development.

Senator WEICKER. Mr. Chairman, I wonder if I might have one short question of each person as we go along.

SCHIZOPHRENIA

One brief question of you, Dr. Goldstein, since I did not have a chance earlier to ask a question. What is the cooperative effort between your Institute and persons in the National Institute of Mental Health on the matter of schizophrenia? There was considerable discussion at the hearings I held last November about whether there ought to be a greater cooperative effort between psychiatrists and those that are working on the basic brain research, between the neuroscientists and the psychiatrists.

How do you respond?

Dr. GOLDSTEIN. Our research program at this time is primarily geared to the basic neurological science issues of schizophrenia. We are working quite diligently in that area. We are trying to learn what goes wrong biologically in the brain of the schizophrenic patient. What are the neurotransmitters involved? What are the metabolic changes? What are the cellular and molecular changes?

Second, in three of our positron emission tomography research centers, these are the most sophisticated research units in the country, the regional cerebral metabolism of schizophrenic patients is being studied. We have the unique skills to do that type of research because in these areas we have the instrumentation and trained investigators.

Third, we are working very hard at seeing that this research information, these biological studies of the human brain, its metabolism in health and in the disease called schizophrenia, is transmitted rapidly to other clinical investigators. We are already involved in clinical research in schizophrenia, but it is research which is within our technical abilities and resources. There is no animal model for schizophrenia, and so clinical scientists must work with the schizophrenic patient. These patients are primarily available in mental health clinics or psychiatric hospitals and, therefore, under the care of the psychiatric community.

Our best contribution is to provide the basic and preclinical information that skilled clinical investigators can apply to the human subject.

Senator WEICKER. Do we have any joint teams, in other words, that are comprised of persons under your aegis?

Dr. GOLDSTEIN. No; we do not. The clinical teams are under the direction of psychiatric and psychological investigators.

Senator WEICKER. Do you think that might be advisable, a little closer meshing of effort?

Dr. GOLDSTEIN. I would agree with you. But I must say you are addressing the problem of territorial prerogatives that characterize the university medical school and the university hospital where research is conducted.

Senator WEICKER. I am glad you say it, because that is ridiculous. I understand exactly what you are talking about, but it seems to me that this is moving ahead on two fronts, and there ought to be a little different initiative taken.

Dr. GOLDSTEIN. I think there is a beginning of meshing, and this is being explored by our colleagues in NIMH who have set up task forces to address research initiatives in schizophrenia. There are now several of these groups in which neurologists, psychiatrists, and the basic scientists are members of a single task force. These are aimed at defining specific multidisciplinary research problems. As a result, these people are beginning to talk to each other, not yet in the university setting, but at least on the task force.

Senator WEICKER. Let us see what we can do about this.

My question to Dr. Shulman, both Senator Hatfield and I have expressed a special interest in EB. There are not many patients involved.

There is not much in the constituency, but there are brave people who have come before this subcommittee and spoken for the funding.

When you say there have been some advances, what are we talking about, because there have been very few funds allocated to research in this area? What is it you are referring to?

Dr. SHULMAN. As we reported last year, there is a defect in the anchoring fibrils. Those are the fibrils that keep the outer layer of the skin tied to the inner layer of the skin. These anchoring fibrils have now been found to consist of type VII collagen.

Other investigators have found that collagenase, the enzyme that breaks down the collagen, is produced in excess in EB. The gene for collagenase has just been cloned by Dr. Eugene Bauer, who is a prime researcher in this area.

We are carrying on a major clinical trial of dilantin, phenytoin, on EB in 15 centers. We have also set up an EB registry, as we had promised to do last year. You will remember that funds were to be provided for a national registry. That has been established.

Senator WEICKER. Do you feel that you have sufficient funds to develop this promising avenue that you just discussed?

Dr. SHULMAN. This field is moving, yes, sir.

Senator WEICKER. Do you have the money to do it?

Dr. SHULMAN. Yes, sir; we will continue to emphasize that wherever possible.

Senator WEICKER. Thank you.

Senator CHILES. Dr. Alexander.

NATIONAL INSTITUTE OF CHILD HEALTH AND HUMAN DEVELOPMENT

Dr. ALEXANDER. Thank you, Mr. Chairman. In addition to the NIH centennial observance this year, a number of institutes are observing anniversaries of their own. NICHD is one of these. This will be the 25th year since President Kennedy signed the legislation authorizing the National Institute of Child Health and Human Development to focus on improving the outcome of pregnancy and the health of mothers and children.

In preparing for our anniversary observance, we have looked back at a number of the research accomplishments that have been achieved during that time. It is an impressive list. Included among these many advances is developing a new prenatal test for determining fetal lung maturity. This test indicates whether the baby may be delivered without risk of developing respiratory distress syndrome. NICHD-supported scientists have also developed a way to induce fetal lung maturity in those babies whose lungs are not yet mature.

We developed a vaccine to prevent RH hemolytic disease so that RH negative women no longer have to worry about this serious problem killing or permanently handicapping their infant.

We developed a methodology for newborn screening for congenital hypothyroidism. This screening test permits the prevention of about 1,000 cases of mental retardation each year.

We developed many of the methods used in neonatal intensive care units that have enhanced the survival of low birth weight infants so that the weight at which one-half of them survive has decreased from about 4 pounds to about 1¾ pounds.

Also included is the discovery of releasing factors for pituitary hormones, and of growth factors, that have earned three of our scientists the Nobel Prize, including this year's award to our long-term grantee, Dr. Stanley Cohen.

When our Institute was established, the decline in the Nation's infant mortality rate had stopped, and President Kennedy had just lost his infant son to respiratory distress syndrome.

During the ensuing 25 years due in large part to advances from research, the infant mortality rate in the United States has declined from 25.3 per 1,000 live births to 10.6. The maternal mortality rate has declined from 35.2 deaths per 100,000 live births to 7.8. The fertility rate has decreased from 112.2 to 66.1, largely as a result of improved means of contraception that have facilitated family planning. If Patrick Bouvier Kennedy had been born today, his chance of survival would be nearly 100 percent.

As dramatic as these improvements have been, there is still much to do. We are supporting clinical trials of human and artificial surfactant treatment for tiny newborns for whom respiratory distress syndrome is still a problem.

Three new vaccines developed by our intramural scientists to prevent pertussis, typhoid fever, and *Haemophilus influenzae* infections in infants are in various stages of field trials and look spectacularly effective.

In our low birth weight initiative, clinical trials in our new networks of neonatal intensive care units and maternal-fetal medicine units are ready to begin.

In our contraceptive development initiative, studies are underway of new contraceptive methods and delivery systems including long-acting implants, injectibles, and skin patches to improve both safety and effectiveness. We are also supporting behavioral studies related to teenage pregnancy.

Other efforts are focusing on birth defects, mental retardation, injury prevention, sudden infant death syndrome, and AIDS. Meanwhile, our basic scientists are applying new techniques in genetics, the neurosciences, and developmental biology to discover new approaches to these and other problems.

We have come a long way in 25 years, and it is important that we have because our children, of course, are our country's future.

You have our budget request. I will be pleased to answer any questions.

MENTAL RETARDATION

Senator WEICKER. I will be glad to read your full report as to the advances that have taken place in research related to the cause and treatment of mental retardation, but I note that the administration proposes

eliminating $50 million in the Department of Education budget for early intervention programs for handicapped infants, and it also proposes to cut the Institute of Child Health and Human Development by $45 million.

Would you like to comment?

Dr. ALEXANDER. The President's budget request for the NICHD included a provision to extend the availability of $23.4 million of fiscal year 1987 funds into fiscal year 1988. The result of this proposal stabilizes available funds for NICHD in fiscal year 1987 and fiscal year 1988 at approximately $345 million.

Senator WEICKER. The proposed carryover then cuts 1987, and those are pretty drastic cuts. Right here, I am talking about close to $100 million being taken away in terms of research and in terms of developing a state of the art that we know, which is the education at the earliest possible date, which does not eliminate but alleviates retardation and it makes it possible for these youngsters to lead a normal life.

Dr. ALEXANDER. We still will be providing funds for research support in our own programs and in cooperation with the Department of Education, to evaluate early intervention programs for children to try to determine the most effective methods.

Senator WEICKER. Let me just say one thing categorically so you can adjust your own planning. There is not going to be any cut in your Institute, and there is not going to be any elimination of the early intervention program. You can count on it.

Senator CHILES. From National Eye Institute, we will hear from Dr. Kupfer.

NATIONAL EYE INSTITUTE

Dr. KUPFER. Thank you, Mr. Chairman. Visual problems take a terrible toll in this country. Each year at least $16 billion is spent to provide professional care and special services to people with eye problems. Fostering research to improve the treatment, prevention, and rehabilitation of visual disorders is the mission of the National Eye Institute.

An important characteristic of the National Eye Institute's program is the close relationship between laboratory research and clinical needs. This relationship is well illustrated by studies on the eye complications of diabetes.

As I have indicated in past testimony, there are 10 to 11 million people with diabetes in this country, and 40 percent of them have at least mild signs of a potentially blinding eye disease called diabetic retinopathy. The aldose reductase inhibitors, a class of drugs initially developed in laboratory research at the National Eye Institute, have shown tremendous promise as a means of preventing the eye complications of diabetes.

Now we are getting indications that the drugs may be of even wider usefulness. Scientists in several nations have obtained clinical evidence suggesting that aldose reductase inhibitors can prevent or reverse diabetic neuropathy, the painful and disabling nerve disease that develops in many diabetics.

Also, there is now evidence that kidney abnormalities which occur in diabetes may be prevented or reversed by these inhibitors. Clearly, it is critical that we obtain definitive clinical evidence of the full potential of these drugs. At present, the National Eye Institute is overseeing a major clinical trial to learn whether aldose reductase inhibitors can prevent or slow down the development of diabetic retinopathy and diabetic neuropathy.

We expect that this and other clinical investigations will tell us whether aldose reductase inhibitors are truly safe and effective. If so, many more people with diabetes can be spared sight- and life-threatening complications.

Another area in which laboratory research is likely to bring about a clinical revolution is in the management of cataract. This is one of the most widespread of all eye disorders. About 5 million Americans are affected by it, and that number may increase, even double, in coming decades unless some means of prevention is found.

Over the past few years, scientists supported by the National Eye Institute have made considerable progress in understanding the biochemical changes in the lens of the eye that lead to cataract. Emphasis is now being placed on identifying the particular species of molecules that cause harmful reaction within the lens. With this knowledge and other information that will emerge from continued research, scientists in collaboration with pharmaceutical firms may soon be able to design drugs that will prevent or slow down the development of cataract.

The public health implications of this are enormous. If the need for cataract surgery could be postponed by just 10 years per patient, that would reduce cataract operations by about 40 percent.

Molecular biology also is being used to solve outstanding problems of vision research and is yielding impressive results. Within this past year, the National Eye Institute grantees have cloned and begun to study the gene that is involved in retinoblastoma, a hereditary cancer of the eye.

National Eye Institute-supported investigators have also identified and isolated the genes that code for the light sensitive pigments of the eye, including those responsible for color vision.

In addition, National Eye Institute-supported scientists have cloned the genes coding for a retinal protein implicated in autoimmune uveitis, inflammation of the eye.

All of these studies and other supported research involving gene mapping and gene sequencing will pay great clinical dividends in coming years. Thus, the National Eye Institute and the scientists whose work it supports are making substantial progress toward improving the visual health of this Nation.

I would be happy to answer any questions, sir.

Senator CHILES. We will hear from Dr. Kirschstein.

National Institute of General Medical Sciences

Dr. Kirschstein. Thank you, Mr. Chairman, Senator Weicker. As Dr. Alexander told you, this is the year that several institutes celebrate a special anniversary above and beyond the NIH centennial. This year, the National Institute of General Medical Sciences will celebrate its 25th anniversary. I wish to reaffirm the essentiality of the mission of this Institute to support basic undifferentiated fundamental biomedical research.

This past quarter of a century has seen dramatic advances in the areas of molecular biology, recombinant DNA technology, molecular cloning, and gene sequencing. Indeed, these advances were supported by the National Institute of General Medical Sciences as they developed into the tools that have led to today's biotechnology revolution as well as to the new findings that all my colleagues have reported regarding ways to prevent and conquer the many diseases that they have been discussing over these past few days.

In recent years, studies have pointed to the importance of understanding the physical structure of molecules such as proteins and nucleic acids in relationship to their functions. These so-called structural biology studies hold great promise for important medical advances as well as for applications that will permit researchers in the United States, as well as biotechnology firms, to remain competitive throughout the world.

In order to bring all of this to fruition we must train highly qualified scientists to perform research in the future. These individuals are in enormous demand not only by academic institutions but also by the new industry that has developed as a result of this biotechnological revolution.

I am very pleased that, with the funds specifically appropriated to research training in 1987, the National Institute of General Medical Sciences, which is preeminent at NIH in research training, will be able to provide such training opportunities for highly motivated, bright, and creative individuals.

This is particularly noteworthy for our special program called the Medical Scientist Training Program, the program to train young men and women who want to obtain an integrated dual degree, the M.D./Ph.D. degree. These individuals will play a very important role in continuing research activities in the future. These are our best and brightest students, and they are the future.

Mr. Chairman, the biotechnological revolution is continuing, and the opportunities to expand our knowledge have never been greater. Amazingly, the results of basic undifferentiated research are being translated more rapidly than any of us would ever have dreamed. We expect these discoveries from basic research to continue to be applied in research on specific diseases that the categorical institutes support and also in various commercial efforts to make medical, agricultural, or industrial products. The momentum is enormous, and the promise is very great.

I would be pleased to answer questions.
Senator CHILES. Do you have any questions?
Senator WEICKER. No.
Senator CHILES. Dr. Pickett with the Division of Research Resources.

DIVISION OF RESEARCH RESOURCES

Dr. PICKETT. The Division of Research Resources, the program I have been directing for almost 5 years now, is somewhat different in nature from what has been presented so far; however, its purpose most generally stated is the same as that of the institutes—to support biomedical research—but the Division supports it across the board multicategorically, as we say at NIH when we are talking about research that cuts across the mission areas of several institutes.

We focus neither on particular diseases nor on particular body systems. We enable or facilitate research in special centers, and that research is likely to be on almost any relevant biomedical research topic.

The Division is comprised of five distinct subactivities and supports the process of biomedical research by providing access to a variety of special resources such as clinical research environments where studies involving human patients are carried out. Some of the projects that Dr. Alexander was mentioning are the kinds of activities that go on in our centers. In fact, a new study of surfactants, which has been published involving 15 investigators, used one of our centers in doing this work on human patients.

BIOMEDICAL RESEARCH TECHNOLOGY PROGRAM

A second program supports advanced technology centers for biomedical computing or for studies of biomolecular and cellular structure and function.

LABORATORY ANIMAL SCIENCE CENTERS

The third program supports laboratory animal research centers, which make special animal models, including some 13,000 subhuman primates, available to investigators and where research is conducted on reproduction of animals, and on the diseases and health of laboratory animals which leads to better animals for research.

BIOMEDICAL RESEARCH SUPPORT GRANTS

A unique program, the Biomedical Research Support Grant Program, provides broad multicategorical support to 605 eligible institutions. Eligible means those institutions that have a threshold amount of $200,000 and at least three Public Health Service grants. The unique feature here is the flexibility and local determination of how those funds are spent.

MINORITY BIOMEDICAL RESEARCH SUPPORT PROGRAM

Finally, the Division of Research Resources has become a major Federal focus for research support programs that attempt to remedy a very tough problem, the too low participation in biomedical research of most minority groups in this country. In our Minority Biomedical Research Support Program there are approximately 1,500 students involved with about 800 faculty working on some 700 projects at more than 90 minority institutions, all of which serve large minority populations.

The outcomes of that program, the latest figures gathered from national data bases tell us that there have been more than 1,100 doctorate degrees obtained by students who have participated in the program over the last 15 years.

AIDS RESEARCH

Our long statement for the record provides details about the kinds of research that are going on, but let me assert that noteworthy research is enabled by our programs. The clinical research centers, for example, are assisting the AIDS effort in a major way. Thirteen of the NIAID's AIDS treatment evaluation units use 16 of our general clinical research centers increasingly for studies of treatments. The seven primate research centers have been a significant focus of study on the simian immune deficiency diseases associated with several retroviruses that were identified early on.

In both the clinical research centers and the primate centers, a range of other problems and diseases are studied. I will just list a few: herpes; leprosy; reproductive problems; problems of prematurity; diabetes; cystic fibrosis; genetic defects; and so on.

In the high technology centers, advanced equipment allows us to look at the three dimensional structure of cells and the structure of proteins, to contribute to the gene sequencing effort, and to engage in software development and information handling for biomedical research.

What our biomedical research technology centers do is identify the needed technologies for biomedical research and support research on the technology to make it useful for biomedical scientists. Right now, we are moving into some activities with supercomputers and expect to support at least one center this year to provide access to supercomputer programs for biomedical scientists, training for biomedical scientists in the significance of supercomputers for them and so on.

TRAINING OF RESEARCH VETERINARIANS

A few additional notes. Our animal program provides for laboratory facility improvement for both the primate centers and other institutions in this country where large numbers of animals are used in research. We are highlighting in the animal program this year the training of research veterinarians, a scarce commodity, to put it mildly, to fill slots that have been created by our own new tight guidelines, and by our strengthened animal welfare policy, on the animal care and use com-

mittees in the institutions and in the management of the central animal facilities that many institutions have.

Our Shared Instrumentation Grant Program, now entering its fifth year, has been doing yeoman service in reequiping our Nation's laboratories. Groups of three or more Public Health Service funded investigators can apply for instruments that can be shared by them. We have awarded over 700 such instruments so far.

We award a large number of center grants and what are called other research grants, but we do not award any RO–1 project grants, so we were not involved in the forward funding and advanced appropriations strategies which characterize the NIH budget request.

Our request for 1988 would permit DRR to maintain much of its ongoing program effort. All of our programs will continue at approximately the 1987 level. One exception to this pattern is the biomedical research support formula grant, which I alluded to earlier. It is eliminated from the request as part of a broader effort to support 19,000 new and competing research project grants and at the same time be responsive to the need for deficit control.

I would be glad to answer any questions.

Senator CHILES. Thank you.

Now we will hear from Dr. Rall.

NATIONAL INSTITUTE OF ENVIRONMENTAL HEALTH SCIENCES

Dr. RALL. Thank you, Mr. Chairman. It is a pleasure to appear before you today to tell you about the National Institute of Environmental Health Sciences. Rather than describe some of our research, let me spend a few minutes describing the function and the history of NIEHS. It is somewhat different from the other NIH institutes.

We are the principal scientific organization devoted to the study of the effects of environmental factors on human health. We investigate the biological effects of toxicity of many environmental agents, some of which I am sure are familiar to you and others, your PCB's and dioxin, lead, EDB, benzene, formaldehyde as well as such air pollutants as sulphur and nitrogen oxides, and effects of acid rain on human health.

We use in our laboratories and at our grantee institutions bacteria and animal cells and tissues and whole experimental animals to determine what damage these agents do and how they do it. We also do epidemiological studies using groups of exposed and unexposed people to ascertain deleterious effects.

The results of these studies are useful to other scientists, to physicians in explaining and describing symptoms of toxic chemical exposure, to the public, and they form the basis for environmental regulations as issued by the health regulatory agencies, the Food and Drug Administration, the Environmental Protection Agency, Occupational Safety and Health Administration, and the Consumer Product Safety Commission.

For instance, the results of an NIEHS study on ethylene dibromide, or EDB, led to the action about 2 years ago by EPA to initiate controls on its use. The NIEHS studies supported largely by grants over the past

15 years have led to a further understanding of the deleterious effects of lead on the growth and development of children, to the steady lowering of the action levels for lead and, in fact, have clearly prevented brain damage in kids due to lead.

By way of history, this last year we celebrated our 20th anniversary. We were founded in 1966 by the Public Health Service at the urging of this committee and its counterpart in the House. These committees also required that our laboratories and our headquarters be outside the metropolitan Washington area. We currently occupy a lovely site in Research Triangle Park in North Carolina.

I have a short history of the NIEHS, and perhaps you and Senator Weicker would be interested. I would be pleased to answer any questions you may have. Thank you.

Senator CHILES. Thank you, sir.

We will hear from Dr. Lindberg with the National Library of Medicine.

NATIONAL LIBRARY OF MEDICINE

Dr. LINDBERG. Mr. Chairman, in 1986 the National Library of Medicine celebrated its 150th year of service to the United States with a series of events aimed at increasing Americans' awareness of the scientific information services we provide.

NLM is renowned as the world's largest biomedical library, and also for its pioneering worldwide systems that use computers to increase access by scientists and health care practitioners to the knowledge of the scientific literature which is held and organized by the library.

During the past very few years, however, remarkable changes have occurred in the pattern of use of these collections. Many physicians now have personal computers in their offices. These are increasingly used to call NLM to get references and abstracts of scientific articles that help form the basis for treatment of individual patients. Three million four hundred thousand times last year online inquiries were made to NLM, and over one-half concerned patient care decisions.

Even public agencies seek our guidance through this kind of electronic inquiry. For example, the NLM computer data bases on toxicology and environmental effects of dangerous chemicals are used by hazardous materials emergency teams in handling chemical spills. On November 3, 1986, to take a local example, a tractor-trailer overturned exiting I–95 at Route 32. Computer access to our files and telephone interactions with NLM were credited by the emergency team with preventing a major fire and explosion and with eliminating the necessity to evacuate the adjacent communities.

Mr. Chairman, this kind of event occurs many times each year in the United States. To us, it means that the library's work is increasingly important and also that we must increase our efforts to build up factual computer data bases that will support health care and biomedical research in the future.

Three NLM initiatives are of special importance in this connection:

First, the Unified Medical Language System. This will improve even further the doctor's ability to use clinical terminology to obtain information from the published literature and other relevant computer data bases. The payoff here is improved patient care through access of up-to-date medical knowledge. The project was initiated a little more than 1 year ago and already combines NLM internal research with that of research teams at six universities. It is making very good progress.

Second, we have directed our top priority efforts to a similar integration of vocabulary and access methods in the field of biotechnology. Here, the payoff for intensive application of information systems is scientific discovery; that is, new knowledge. In this case, we expect that new NLM systems will be available to support research at NIH and many other sites in this most important field. The result: to speed up discovery of principles in human genetics, understanding of basic processes, and even new drug treatments through the recombinant DNA process.

Last, the Board of Regents with its advisors has completed its long-range plan for NLM. Their plan emphasizes especially the Unified Medical Language System and biotechnology, the two initiatives I just reviewed, and also identifies a number of other opportunities for NLM to continue to contribute strongly to progress in science and medicine over the next 150 years.

Our request is in the amount of $64,399,000. I shall be pleased to answer questions.

ACCESS TO INTERNATIONAL INFORMATION

Senator CHILES. What is your Institute doing to access information which other countries have and then translate to so many that information?

Dr. LINDBERG. It happens that the Index Medicus was started in 1879 by John Shaw Billings, and it was even then entitled Index to the Biomedical Literature of the World. So from the beginning it really has been a worldwide resource. About 53 percent of the entries in the current MEDLINE file are from abroad. I think it is true that we bring that added benefit to Americans. We bring the literature of the world to this country.

Senator CHILES. Do you translate all that?

Dr. LINDBERG. We translate the titles and, of course, convert them in Roman characters if they are in other alphabets, like Cyrillic. We do not undertake to translate the entire article. That would be terribly expensive.

On the other hand, way over 70 percent of the scientific literature in the world is written in English now, and many other foreign articles have English language abstracts, so the problem is somewhat reduced from what it used to be.

Senator CHILES. How much do you think we are really using that information if it is not translated, even though you have translated the title?

Dr. LINDBERG. I do not know that I have a good measure, but I think the problem, if it was a problem, is a smaller problem now than it was 20 years ago just because of the preponderance of English.

If you take Russian, for example, or Japanese, in both cases there are extensive exchange programs and we collect those journals. We physically hold the journals, and in most cases the advanced journals of science in Russian and Japanese will present an English language abstract.

Therefore, I think it is a decreasing problem.

Senator CHILES. In the biotech information that you are cataloging now, are you doing anything there with foreign biotech?

Dr. LINDBERG. Yes; as I said, we consider the development of advanced information systems in biotechnology to be the NLM's top opportunity to contribute to progress in science partly because, as Dr. Kirschstein indicated, the progress in the laboratory to determine sequences and structures is so fast and the translation in the clinic is so rapid that obviously the opportunity for good is very large.

I think she suggested also that the findings in the laboratory are coming so thick and fast that the data base systems that exist right now are unable to keep up. They need to be replaced by new ones, and that is what we are helping to do.

In addition there is a problem in scientists being able to ask questions across the different data bases, ones that have, let us say, chemical sequences and then others that have chromosome maps. You really want to be able to move easily between all patient information sources in order to make a significant discovery. That coordination needs to occur.

The best known factual data base, GenBank, has long been supported by NIH, primarily under the aegis of NIGMS but supported by other institutes, including NLM. In that case there is a really very good workable exchange of information between the American investigators and those working with the European Molecular Biology Laboratory—EMBL, so, in effect, there is one data base shared internationally.

It is an interesting question to look at it from the point of view of the question you raised yesterday about competitiveness, but the fact of the matter is that right now scientists are quite willingly sharing the chemical sequence data because otherwise their discoveries are virtually meaningless unless they are compared against a very large data base.

INTERNATIONAL EXCHANGE OF BIOTECHNOLOGY INFORMATION

Senator CHILES. That is the question I wanted to ask you and Dr. Kirschstein both. Do you find that our trading partners or the other countries are as open as we are with access to the information in biomedical research?

Dr. LINDBERG. I defer to Dr. Kirschstein, but I believe the answer is yes.

Dr. KIRSCHSTEIN. I believe the answer is basically yes. Scientists in academic circles, in the universities of the world, engage in a complete exchange of information among themselves but they also continually talk with scientists in the biotechnology companies.

Senator CHILES. That does not totally satisfy me, because we do much more of ours in the academic circles, and they do much less.

Dr. KIRSCHSTEIN. I wanted to note that for the record first.

Although there is a great deal of biotechnological development occurring in companies throughout the rest of the world, the United States is still preeminent in this area. Continued research in biotechnological areas should assure the leading role of the United States and exchange of information with scientists abroad will be of mutual benefit. The biotechnology revolution is so young, however, that there is not yet the danger of losing momentum similar to what happened to the semiconductor business.

Indeed, just yesterday I read an article by the leader of one of the largest biotechnology companies in the United States, the Cetus Corp. Dr. Ronald Cape, who is the president of the company, believes that the worry about biotechnology moving away from the United States is premature. He finds a great deal of cooperation between the Japanese, for example, and companies in the United States and declares that people are working better together than he anticipated they would.

There are a number of very exciting biotechnological developments in the United States that companies here are supporting. In addition NIH is supporting this area through its Small Business Innovation Research Program. We feel that this program is going very well and that this work is not moving away from the United States as rapidly as perhaps people have felt it would.

Senator CHILES. I certainly hope that is true, and I do not speak from any vast reservoir of knowledge other than the patterns of what has happened in all these other areas and now knowing that our competitors are also moving very quickly. Nothing I think suits their purpose better than to allow us to spend our dollars doing the basic research and then allow them to take that leapfrog from being able to take that and just having their dollars to spend in the development effort.

Dr. KIRSCHSTEIN. Dr. Wyngaarden told you yesterday about a meeting of the NIH Directors Advisory Committee on Biotechnology. As an outcome of that meeting, he has established a committee called the NIH Biotechnology Activities Committee, of which I am the chairman. We are watching these developments very carefully, and we will continue to report on them to you.

Senator CHILES. Well, maybe my question should have been directed to you yesterday, but do you think there are other things that we can do, given the fact that somehow our industries need to be spoonfed much more, maybe more than other countries, to know that there are these potentials, that there is this ability, this information that is out there, and that, of course, there are tremendous dollars that could be made if they pursue it?

Are we having the institutes put on the seminars, are we getting the word out, are we getting a little light out from underneath the bush, so to speak?

Dr. KIRSCHSTEIN. I think we are, sir. There are several organizations of these industrial biotechnology companies, and we, at NIH, meet with them, discuss efforts with them, and try to facilitate their activities. The Office of Technology Assessment of the Congress is concerned about this as well, and is doing a second study. You will recall that they performed a similar study some years ago that resulted in a book called "Commercial Biotechnology."

We think we are doing what is needed, and we are trying to strike the balance between maintaining industrial competitiveness in the United States and sharing scientific information generally. Many university scientists are consultants to, and collaborators with, small biotechnology companies throughout the United States. We think there is a great deal of collaboration between academia and industry and we, at NIH, encourage such efforts.

Dr. WYNGAARDEN. Mr. Chairman, if I could add, we have also taken steps in the past year to increase the flow of information between NIH and the industrial component of our society.

There are two specific parent organizations that include these companies. One is composed of the larger companies, and one of smaller firms. We have attended and spoken at their national meetings. They have asked us to explain the NIH better to those who do not know us as well as others, and we have done that. We have also put on seminars twice at the NIH for representatives from industry, and they have been very well attended. As a result of these contacts, we expect that there will be more scientists from industry coming to spend periods of time at the NIH. Some will come for short periods to learn techniques, with others perhaps coming for longer times to really engage in elaborate research.

Senator CHILES. I think it is very beneficial.

Dr. Merritt.

NATIONAL CENTER FOR NURSING RESEARCH

Dr. MERRITT. It is a privilege to make the first presentation from the National Center for Nursing Research to you. The Center was authorized by the Congress on November 20, 1985. Secretary Bowen announced its establishment at the NIH on April 18, 1986, and 5 days later we moved core staff dealing with research programs in the Division of Nursing to the NIH in temporary quarters. We plan to be in permanent quarters before the end of the year.

The transfer of the budget and the research and research training programs of the Division of Nursing, was complete 2 months later. With the support of the Director and strong support of many of the Institute directors at this table who lent us personnel and lent us expertise, the NCNR was able to obligate its entire fiscal year 1986 appropriation.

Since then, we have chartered two initial review groups which will assure that the research programs of the Center will be reviewed with the same rigor for scientific merit and technical merit as the other programs of the NIH.

The NCNR Advisory Council has been established and held its first meeting last month. The nomination of a director at the Center is being processed.

Nursing research is scientific study which provides the basis for good nursing practice wherever it occurs, in the home, in the community, in the hospital, in the workplace. It crosses the lifespan from the fetus who is curled in the mother's womb to the octogenarian whose family is concerned with how to manage urinary incontinence, how to manage a failing memory, or perhaps to put the patient in a nursing home.

Our efforts to handle the broad mandate of the congressional authorization have caused us to establish our programs in four areas. One of these is career development, where we intend to be sure that the nurse scientists of the future will be adequate in number and extremely well qualified. We cover health promotion and disease prevention, acute and chronic illness, and nursing systems as special projects.

I would be pleased to answer any questions.

Senator CHILES. Thank you, Dr. Merritt.

INFANT MORTALITY

Dr. Alexander, in spite of the breakthroughs and the discoveries that we have made in better techniques in handling infant mortality, we still find the United States ranking 16th now. It is a miserable showing among the community of nations.

Congress is going to have a National Commission on Infant Mortality that will come into being this year. The basis of the commission primarily is to not do another study. We think we know that low birth weight is a principal problem that we have along with teenage pregnancies, the lack of prenatal care and the diet and other things. It is a question of really trying to determine how we can set up some kind of national delivery system and to focus on the information that we now know of and see how we can correct that.

What do you think should be some of the major things that you would hope a commission like this would be able to look at? Primarily I think what we hope the commission would do is to give us a sort of marching order, a plan within 1 year that we could move on and try to do that.

I would like to have your advice.

Dr. ALEXANDER. I think there are a number of factors that your national commission needs to examine. First among these is how to best apply what we know, how to apply what we have learned from the research that has been done and from our experience with the improvements in services that have come as a consequence of that research. Much of what we have learned is not being applied across the land.

We are not able to get women to start prenatal care as early as they should. We are not able to provide a continuity of prenatal care for them. I am speaking not only about the medical components of prenatal care but also about other components as well, such as nutrition advice, social support services, and assistance in modifying certain behaviors.

Of all the things that we know to do to cut back on low birth weight, the primary one is to encourage mothers not to smoke while they are pregnant. The Centers for Disease Control is working with States to develop better methods for encouraging women to either not smoke at all or to cut back on the amount of smoking that they do while they are pregnant.

One of the things that was not specifically included in the legislation but which I hope the commission will address in the course of its deliberations, is the further contributions that could come from research. We have plateaued, as you are well aware, in our rate of decline in infant mortality, and that, of course, is one of the reasons we had concerns which prompted the establishment of the commission.

We reached a plateau once before—about 1955 to 1965—in our decline in the infant mortality rate. The infant mortality rate only declined by about two points during that period. Up until that time, most of the decline had been accounted for by what we call postneonatal mortality; that is, infant deaths after 1 month of age and before 1 year of age. Most of that decline was due to the conquest of many infectious diseases and the elimination of diarrhea as a cause of infant death.

The decline in infant mortality rate picked up again around 1965, and that has come largely as a consequence of improving immediate neonatal mortality; that is, death in the first month of life. Most of the improvement has been accomplished by our enhanced ability to save the low birth weight or premature infant.

What appears to be happening now is that we have again reached a plateau. We may be at the point where, with the techniques that we now have available, we have gone as far as we can in saving these low birth weight babies.

Senator CHILES. That was the feeling of where we were and why we did not put that much emphasis in research. We did not know how much more we could do there, given that we have done a great deal.

Dr. ALEXANDER. The key is preventing low birth weight.

Senator CHILES. The cost is so great now of any further breakthroughs in the medical and technological as opposed to preventing the low birth weight.

Dr. ALEXANDER. That is the primary emphasis, and that is the reason that the Institute launched its low birth weight prevention research initiative 2 years ago.

LOW BIRTH WEIGHT

Senator CHILES. How do we go about trying to get a county commission, people at that level, to understand that the dollars that they would spend in trying to set up a network of prenatal care would be saving dollars, as opposed to what we are spending when we pick up these low birth weight infants once they are born and put them into neonatal clinics and try to keep them there and then the cost that we have for those that survive who many times have birth defects? We have to continue to pay for them.

Dr. ALEXANDER. We clearly need to do a better selling job on prevention. We need to encourage the efforts of the Public Health Service's Healthy Mothers/Healthy Babies Coalition. It is a grassroots effort at the local level.

Senator CHILES. Some of those do very well.

Dr. ALEXANDER. We still lack the basic knowledge, though, to prevent low birth weight in many instances. Our incidence of low birth weight is higher than that of many other countries. Our incidence is about 6.7 percent of all births.

Senator CHILES. You say we lack the basic knowledge on how to prevent it. Are you talking about a cumulative medical knowledge, or are you talking about having that pregnant mother have the knowledge?

Dr. ALEXANDER. I am talking about both.

Senator CHILES. Do you think there is other medical knowledge?

Dr. ALEXANDER. Yes, sir; some of the research that we are involved in with the low birth weight initiative is directed toward acquiring that knowledge. For example, we are trying to determine whether silent infections in the mother during pregnancy may trigger premature labor, how best to manage premature labor when it does occur, how to prevent premature rupture of the membranes, how to deal with premature rupture of the membranes when it does happen, how to prevent pregnancy-induced hypertension, and how best to deal with various complications of pregnancy.

Senator CHILES. Are those areas that we are aggressively pursuing?

Dr. ALEXANDER. All of these are components of the Institute's low birth weight prevention initiative.

Senator CHILES. You selected out nonsmoking. What do you see as the potential in trying to reverse infant mortality figures if we could have some success in that program? Is there any way to quantify, let us say, what you are saying as to why this is a major emphasis?

Dr. ALEXANDER. The recent Institute of Medicine report on preventing low birth weight identifies cigarette smoking as the No. 1 preventable cause of low birth weight that we know about.

Senator CHILES. More than nutrition?

Dr. ALEXANDER. Yes; more of a factor than nutrition. It is estimated we could perhaps reduce the incidence of low birth weight by 10 to 15 percent if we could eliminate cigarette smoking during pregnancy.

Senator CHILES. Ten to fifteen percent?

Dr. ALEXANDER. Yes; that is correct.

Senator CHILES. That would drop your figures?

Dr. ALEXANDER. There are about 240,000 low birth weight infants born per year, so a 10- to 15-percent drop would be significant. We do not know how to persuade pregnant women to stop smoking, though. It is very difficult. There is an extra incentive, we believe, that can be tapped for women to stop smoking during pregnancy since she is smoking for two as well as eating for two. We have been trying to develop programs that are targeted toward reducing or eliminating cigarette smoking during pregnancy.

Senator CHILES. Do you have any figures or are there any studies where you actually get this information out as to how motivated the pregnant women are?

Dr. ALEXANDER. We have supported such studies. One notable example is at the University of Maryland Hospital in Baltimore where a smoking intervention program during the early stages of pregnancy was successful in reducing the incidence of smoking and, as a consequence, in reducing the incidence of low birth weight. There are a number of other such examples.

Intervention programs can work, but their success rate is not particularly high. We need better approaches to deal with this problem.

Senator CHILES. We look forward to continuing to work with you and the commission as it goes forward.

Dr. ALEXANDER. Thank you. We are looking forward to providing any information and help that we can to the commission.

LOW BACK PAIN

Senator CHILES. Dr. Shulman, in your Arthritis Institute you cover spondylolisthesis. That is a part of the arthritis family?

Dr. SHULMAN. Spondylolisthesis, yes, sir, is really slipping bones, where the bone slips forward onto the other bone. It gets to pinch the nerve sometimes and can give you a lot of pain. It is a disorder in which we do not have much research at the moment. It is a condition of concern to those who deal with low back disease.

We are planning to have a major emphasis on the causes of low back pain, and this would be part of that effort.

Senator CHILES. That is considered part of——

Dr. SHULMAN. Part of one of the conditions that lead to low back pain. Another would be what you call ruptured disk. Another is arthritis, specifically arthritis of the lower spine, which also causes low back pain. All these need to be investigated further, and we intend to do that.

Senator CHILES. That is one of the things that you are starting to work on?

Dr. SHULMAN. Yes, sir; we had a workshop on the causes of low back pain in 1980, organized with the American Academy of Orthopaedic Surgeons; and we published a book on the workshop. We had a blip of research activities right after that, but since that time research activity has sort of sputtered a little bit. We need to stimulate further research in that area.

It is a tough area to research because it is hard to access; there are many structures around the disk and the spine. It needs a multidisciplinary approach. One discipline will not find the answer.

ARTHRITIS

Senator CHILES. What you are doing in arthritis, do you think you are any closer now to really determining the cause of arthritis?

Dr. SHULMAN. I would like to answer that by separating it out a little bit. There are more than 100 different kinds of arthritis called collectively rheumatic diseases. There are some forms of arthritis that we know a lot about; for example, Lyme arthritis. Perhaps you read in my opening statement about the advances made in Lyme arthritis.

It is not the fruit. It is the town in Connecticut, L-y-m-e, where this very interesting form of arthritis in children was brought to the attention of the people at Yale. This has been investigated thoroughly; and it remains a significant problem. Yale researchers have has found out that this was due to the bite of a tick. People who live in the suburbs are more likely to get this disorder than those in cities.

Some of our brilliant intramural scientists at the Allergy Institute discovered the spirochete in the tick itself. Then we gave antibiotics to these people with successful results. In addition, we now have antibodies to the spirochetal bacteria by which we can detect the disease. This is a fine example of excellent research success in arthritis.

For rheumatoid arthritis we have the two major etiologic advances that I just described to you. In terms of treatment, we have new approaches. One is giving methotrexate, a drug used to treat cancer. When given in low doses, it has been found to be very effective in patients who are unresponsive to even second line drugs such as gold compounds. So we are making advances.

In some areas like osteoarthritis, we have a long way to go because we do not understand how the disease takes place. That gives you sort of a spectrum of where we are.

OSTEOARTHRITIS

Senator CHILES. How would osteoarthritis differ from some of these other forms of arthritis?

Dr. SHULMAN. Osteoarthritis is the most common form of arthritis. The Arthritis Foundation estimates that there are approximately 16 million of us who have osteoarthritis. Contrary to common thinking about this, it is not just old age arthritis. One of the misconceptions is that it is an inevitable consequence of aging. There are people in their eighties and nineties who do not have osteoarthritis. Another misconception is that it is always due to wear and tear. That also is not the case.

The target organ in osteoarthritis is the cartilage of the joint. We are beginning to get some very interesting research advances on the cartilage of the joint and what the cartilage cell does. We recently had a special workshop on the causes of osteoarthritis. The proceedings have just been published and contain more than 120 recommendations for future research. We are also going to put out a program announcement asking for more research in this important area.

GLAUCOMA

Senator CHILES. Dr. Kupfer, glaucoma is one of the leading causes of visual impairment in the United States and may be a major cause of blindness among black Americans.

How are we doing in that, and why do we think it is more prevalent among the black Americans?

Dr. KUPFER. Information bearing on this question comes primarily from blindness registries in a number of States. This data indicates that rates of blindness from glaucoma are some eight times higher among blacks than among whites. Also, there is a clinical impression on the part of ophthalmologists that the glaucoma they see in their black patients is a more devastating type of glaucoma and appears to occur at an earlier age. Usually glaucoma occurs in people who are in their sixties, seventies, or eighties. But very often our black patients will develop it in their forties or fifties.

There is a study underway in Baltimore to determine once and for all whether it is correct that glaucoma and visual loss from this disease are more common among blacks than whites. The studies are being done in the two populations in Baltimore.

This study may confirm and clarify our clinical impression that blacks are more susceptible to glaucoma.

Senator CHILES. That is not something that is conclusive?

Dr. KUPFER. That is correct, but it is a very strong clinical impression and I would be surprised if we do not find that glaucoma is more common in blacks than whites. I guess the question is how much more common, and that is one thing we will be able to learn.

We also want to know whether the glaucoma that occurs in blacks is the same type of glaucoma as in whites. Is it just occurring more frequently, or is it actually a different form of the disease? Also, we want to learn what risk factors are associated with it. So we are moving ahead very aggressively to try to answer these questions.

NURSING SHORTAGE

Senator CHILES. Dr. Merritt, we saw that at one time we were saying that we were going to have too many nurses and do we need to go forth with that anymore. Now we are hearing that there is going to be a shortage especially in the graduate nurses.

Do you think that that is correct, and what can you do to reverse that given the fact that you are seeing a smaller enrollment now in the freshman classes? It seems that not as many students are selecting nursing.

Dr. MERRITT. We are aware of these trends. The National Center for Nursing Research is not directly concerned with the enrollment of practicing nurses in some specialty areas where the shortages appear to be. We have been concerned and will be concerning ourselves with research in nursing, and for us that is the preparation of the Ph.D., the investigator in nursing science.

Senator CHILES. You do not think that your Institute has a concern with these numbers that may be declining?

Dr. MERRITT. Our Institute is certainly concerned that there be an adequate number of investigators and nurses in nursing science. We believe there is a sufficient number willing to enter into research training. It is inappropriate for us and we are not prepared to speak about

the number of nurses that will be available for practice. We will do everything we can to insure that the research performed has the greatest possible value to practice. For example, we will work with the Health Resources and Services Administration's Division of Nursing, as appropriate, as they review this issue.

Senator CHILES. What do you see as the rewards for a nurse to enter into the research area?

Dr. MERRITT. Oh, the excitement of science. It is the same set of rewards that exist for any investigator, the challenge of exploring new ways of doing things better. The nurses are not investigators at the molecular level yet, but they may well be with proper research training.

At the moment the chief concern of nurse scientists is how to better life for the patient, for the family, for coping with the stress of today's activities, for patients promoting their own health, being responsible for their healthy behavior.

QUESTIONS SUBMITTED BY THE SUBCOMMITTEE

Senator CHILES. We have some additional questions. We will ask those for the record. Senator Weicker has some further questions, I think, as does Senator Harkin and Senator Domenici.

[The following questions were not asked at the hearing but were submitted to be answered for the record:]

Questions Submitted by the Subcommittee

ALZHEIMERS DISEASE

Question. Alzheimers Disease is the fourth most commmon cause of death in the U.S. causing about 120,000 deaths a year. Yet Medicare and most health insurance plans do not cover the cost of custodial care for Alzheimer patients. Many families in my state spend themselves into poverty caring for their spouses and parents afflicted with this tragic disease.

Brain tissues of Alzheimers victims typically show a plaque associated with the areas of the brain with damaged or destroyed brain cells. Recent research has identified the gene which produces the protein which constitutes this plaque.

Dr. Goldstein, it has been reported that NIH scientists have announced a major finding concerning the development of Alzheimers Disease. Can you tell us more about this finding and its implications?

Answer. There have been several important new findings resulting from cooperation of scientists in a number of research centers. They have reported that a defect on chromosome 21 appears to be responsible for Familial Alzheimer's disease. The defect is related to the presence of an extra copy of the gene encoding for a specific protein, amyloid, deposited in the brains of these patients. This finding of a defect in familial Alzheimer's disease is supported by findings that there also appears to be a triplication of this chromosome 21 gene in patients dying with a sporadic, non familial type of Alzheimer's disease. In addition, this third copy of the gene on chromosome 21 occurs in patients with Down's syndrome who die in their 30's and 40's and show the same type of amyloid accumulation in their brains. We are actively following this lead to determine how the genetic abnormality leads to the degeneration and protein deposit and how interventions might retard or prevent the progression of the pathological processes.

GENETIC ENGINEERING

Question. Dr. Goldstein, there have been some very exciting results in genetics-related research using genetic engineering approaches. Can you describe the implications these findings might have for clinical application in diseases such as Alzheimers Disease, Huntington's Disease, and Muscular Dystrophy?

Answer. Techniques for cloning and characterizing abnormal genes are being applied to several important hereditary neurological disorders. The dramatic success of this approach in identifying and isolating the gene for Duchenne muscular dystrophy bodes well for ongoing similar efforts in Huntington's disease and familial Alzheimer's disease and in many of the biochemically determined storage diseases of childhood. There is preliminary evidence of gene abnormality expression even in non-familial Alzheimer's disease. Understanding the specific defects at the molecular level will allow definition of the biochemical pathology producing the clinical manifestations of these diseases. In turn, this knowledge should indicate directions toward appropriate therapies. Though genetic engineering to replace defective genes

with healthy ones may give promise of ultimate cure of these inherited problems, much work needs to be done before this approach can be realistically employed in humans. As a result of molecular genetic research, genetic linkage markers to identify those persons at risk for inherited diseases should be available in the near future, and provide both for early diagnosis, before clinical expression, and for beneficial genetic counseling.

TRAUMATIC INJURIES

Question. Dr. Goldstein, your institute studies disorders of the nervous system, muscles, hearing and human communication. While these disorders are numerous and varied, most are characterized by long-term disabilities. Head and spinal injuries resulting from automobile accidents are examples of such long-term disabilities. While the Institute is spending almost $40 million on trauma and injury, it has been suggested to the Committee that a new Institute of Head Injury is needed to truly bring full attention to this area. What progress is being made to provide prompt and full treatment and to improve our treatment methods of those who suffer serious trauma and injury?

Answer. The NINCDS supported program of Head and Spinal Cord Injury Research Centers provides for a broad range of research activities directed at improving treatment methods of patients who suffer from serious nervous system injury. Multidisciplinary clinical research activities employ state-of-the-art technology to improve the diagnosis and treatment of the head injured from the time of initial insult, such as occurs from automobile accidents, through the time of onset and resolution of secondary reactions of nervous tissue to these injuries. Past research has documented the importance of early diagnosis and prompt surgical intervention in the treatment of bleeding in the outer membrane of the brain. Current research is directed at the secondary reactions of nervous tissue and the brain. These reactions include brain swelling, progressive lack of oxygen and glucose in the brain, and the accumulation of harmful metabolic by-products in the injured brain. Specific research projects examine the factors involved in the swelling of the brain, the effects of diminished oxygenation in directly injured as well as adjacent tissues, and harmful alterations in nutrient supply, waste removal, and energy-producting, energy-utilizing, systems.

In other clinical studies, investigators have examined the use of corticosteroids for the management of severe brain swelling as well as the use of barbiturates to reduce the metabolic requirements of the injured brain while it is healing. Naloxone and ultra-high-dose corticosteroid are being used in a controlled, randomized, prospective clinical trial of patients with spinal injuries. Although still at the earliest stages of investigation and development, there are promising leads from research in animals for the experimental use of neuronal transplants to aid in the recovery of the injured nervous system. In the future, it may be possible to actually replace tissues damaged by injury and restore at least some of the functions for which the damaged tissues were responsible. These studies are being done in and are dependent upon the rich intellectural environment of basic and clinical

neuroscience research units. Isolation from this environment would be a serious handicap to further research.

Question. What portion of these funds is being used for rehabilitation?

Answer. The NINCDS funds rehabilitation-related research as an integral part of its head injury and spinal cord injury research programs, although the major responsibility for research on rehabilitation lies with the National Institute on Disability and Rehabilitation Research. It is estimated that the NINCDS will spend approximately 15 percent of the $44.7 million total estimate for trauma research on rehabilitation-related research activities in 1988.

AIDS

Question. Dr. Goldstein, we understand that AIDS can seriously affect the brain. What are you doing about research on the neurological complications of AIDS?

Answer. The AIDS virus seriously affects the nervous system as well as the immune system. Dementia and other neurological signs may be the earliest or only evidence of AIDS virus infection in a significant number of adults and children. The nervous system is so often and regularly affected that its involvement should no longer be regarded as a complication but as a frequent primary manifestation of the disease.

In June 1986, NINCDS issued a Program Announcement requesting grant proposals to study AIDS dementia and other AIDS-associated neurological disorders. There has been a marked increase in grant applications in this area and expect this responsive interest to continue and grow. Significant progress has been made by NINCDS grantees in characterizing the neurological and behavioral features of the AIDS dementia complex and the peripheral nervous system manifestations. Studies of AIDS patients utilizing PET technology have disclosed a reduction in brain metabolism, mostly in the white matter, basal ganglia, and brain stem, with relative sparing of the cortex. Serious neurological complications of AIDS include infections by opportunistic micro-organisms that do not often invade the normal brain and by a lymphoma tumor that is rare in immunologically normal individuals but seen frequently in AIDS and in patients otherwise immunosuppressed, as after organ transplantation. These neurological complications are difficult to manage and are also the subjects of intense investigation. There is great concern that the brain, protected by the blood brain barrier, may provide a reservoir for the AIDS virus that will be hard to reach and to eradicate by vaccines or antiviral drugs.

Other NINCDS research activities are focused on: the pathogenesis of AIDS including studies of host factors and the susceptibility of cells of the brain to infection; toxic products produced by infected cells; cofactors causing increased growth of HIV; animal models with neurological involvement; investigations of virus strain difference; treatment studies of drugs which pass the blood/brain barrier; penetration of active compounds into the

brain; and clinical trials of chemotherapeutic agents in AIDS patients with dementia, peripheral neuropathy and polymyositis.

STROKE

Until recently, few studies have examined standard or new procedures to prevent stroke. This is changing and several new clinical trials are planned or in progress.

Question. Dr. Goldstein, what studies have you initiated to improve the outlook for patients at risk for stroke?

Answer. The NINCDS has launched major studies to improve the outlook for two major groups of patients at risk for stroke: those who have narrowing of the carotid artery, and those who have an irregular heart rhythm called atrial fibrillation. Among people with atrial fibrillation, there is a well documented higher incidence of stroke than among those of the same age who do not have atrial fibrillation. A group of major medical centers is cooperating to determine if a low dose of the anticoagulant warfarin compared with aspirin or no treatment will significantly improve the outcome for those with atrial fibrillation. If a significant effect is found, the results could lead to the prevention of a large number of strokes each year.

New non-invasive ultra-sound and other tests have made it possible to screen large numbers of patients for the existence of narrowing of the major arteries to the brain. The availability of a surgical procedure called carotid-endarterectomy is being tested for its effectiveness in the long-term improvement of outcome of patients who have been screened and found to have narrowed carotid arteries. Since there is a very large number of patients who are potential candidates for this surgery, the NINCDS is supporting trials to establish a definitive answer about the effectiveness of this surgical procedure.

Question. Dr. Goldstein, can you tell us what efforts your Institute is making on the prevention of damage from a stroke while the stroke is still ongoing?

Answer. Once patients have survived the rupture of an arterial aneurysm (subarachnoid hemorrhage), there is still a significant risk of an additional stroke caused by blood vessels that go into spasm in reaction to the blood that clots around them after the initial hemorrhage. On the basis of pilot studies that suggested the possible efficacy of a new drug to prevent this arterial spasm, a major randomized double-blind clinical trial that has just begun. If this new treatment is successful in preventing stroke after subarachnoid hemorrhage, there may be significant benefit to patients with this type of stroke.

Stroke causes the sudden loss of function of part of the brain. Within minutes of the time the stroke victim experiences the loss of ability to move the arm or leg on one side of the body, or the loss of speech, part of the brain begins to die. Using a new drug called tissue plasminogen activator that dissolves blood clots, several major university centers are attempting to determine

if emergency intervention begun within minutes can safely improve outcome.

MEMORY

Question. Research indicates how memory is based on the biochemical and electrophysiological properties of the brain. Dr. Goldstein, what advances have been made in understanding the mechanisms of memory that may provide approaches for treating patients with progressively deteriorating brain disorders, such as Alzheimer's Disease, and for reversing memory deficits that result from head injury?

Answer. Recent research in the simpler brains of lower animals has shown that learning and memory are associated with the phenomenon of facilitated synaptic transmission from one neuron to another, with elevated levels of certain compounds known as "second messengers," and with anatomical changes in the terminal branches of nerves. In adult mice, the dendrites or ends of some nerves appear to grow continuously during learning and to alter their connections with other neurons. These observations provide insight into the structural basis of learning and memory in lower animals. In the normal and diseased brain of higher animals and in the human, two structures, the hippocampus and the basal forebrain, are known to be crucial to memory. Both are profoundly degenerated in Alzheimer's disease, and frequently damaged in the amnesic states associated with severe head injury.

There are other brain structures involved but the specific mechanisms of memory storage and retrieval are not well understood. Even in the absence of an understanding of the pathogenesis of memory impairment in the Alzheimer and trauma patient, there are observations in experimental animal models that could eventually lead to therapeutic approaches. For example, cholinergic neurons that are important for memory require a trophic (nourishing) factor, nerve growth factor (NGF), to survive. In old rats with memory failure, NGF has been reported to improve memory. The implantation of septal cells from the fetal brain into the hippocampus of old rats who have lost their earlier ability to deal with a maze also is reported to restore memory. Perhaps some trophic nutritional factor or neuropeptide secreted by the transplanted tissue could be responsible for the apparent restoration of memory. More work is needed before these approaches can be evaluated in primate models and eventually transferred to benefit the patient with head injury or Alzheimer's disease.

MRI AND PET TECHNOLOGIES

Question. To what degree are the MRI and PET technologies generally available for the diagnosis and treatment of the population at risk for stroke and related cerebrovascular disease?

Answer. Magnetic resonance imaging (MRI) and positron emission tomography (PET) scanning are very different technologies that employ totally different methodologies. PET scanning studies the biochemistry and metabolism of the brain and requires the utilization of a dedicated cyclotron, an integrated

radiopharmaceutical laboratory, and considerable costs per study. PET scanning takes much longer than conventional computerized tomographic (CT) or MRI scanning, so that relatively few patients can be scanned per day. PET scanning, therefore, is considered a research tool that provides extremely useful information for the interpretation of metabolic activity within the brain and thus contribute to the derivation of principles applicable to diagnosis and therapy for study patients.

MRI scanners are available throughout the United States. MRI scanning provides for improved anatomic pictures of the brain. MRI is, to a certain degree, complementary to and in competition with CT scanning in that it does not involve a radioactive source. The Institute has initiated a study to determine the value of MRI scans within 90 minutes of patients having had their strokes. Thus, the usefulness of MRI scanning is still being explored.

Question. How expensive are these new diagnostic tools and are they available to Medicare patients?

Answer. MRI as a diagnostic tool is becoming more and more prevalent around the country as hospitals install new units, while PET scanning remains primarily a research activity. The complete installation of an MRI unit ranges between $500,000 and $2,000,000, depending upon the size of the magnet, technical problems related to the installation, and the special features that the equipment employs. These units are available to Medicare patients; however, specific reimbursement schedules vary from region to region in this rapidly evolving technology. PET scanning, being a research instrument, is not available to clinical patients.

EPILEPSY

Question. What progress is being made in diagnosis and treatment of epilepsy?

Answer. Progress in the diagnosis of epilepsy has been made possible by the development of new technologies. Magnetic resonance imaging (MRI), which identifies structural abnormalities is in increasing use as a diagnostic tool; positron emission tomography (PET), which defines metabolic activity, is a useful research instrument and provides new ways to obtain metabolic information about the brain in epilepsy. In addition, the Institute is supporting the development of magnetoencephalography (MEG), a new technology which will provide information about magnetic fields generated by seizure activity in the brain.

Progress also continues in the development of drug treatment of epilepsy. Each year the Institute's Antiepileptic Drug Development Program tests over 1,000 chemicals for activity against seizures. At the present time, over 30 potential drugs are at various stages of clinical evaluation for use in the treatment of epilepsy. Finally, significant advances in understanding the pathophysiology of epilepsy are providing new advances in the surgical and drug management of epilepsy, areas where positron emission tomography is proving to be an important research tool.

GENETIC ENGINEERING

Question. Substantial advances have been made in identifying gene markers for inherited disorders. Technology originally developed for the identification of the marker for Huntington's Disease has now been used to identify a portion of the gene that causes Duchenne's muscular dystrophy. Dr. Goldstein, we understand that there have been very exciting results in genetics related research using genetic engineering approaches. Can you describe the implications these findings might have for clinical application in diseases such as Huntington's Disease, muscular dystrophy and Alzheimer's Disease?

Answer. Techniques for cloning and characterizing abnormal genes are being applied to several important hereditary neurological disorders. The dramatic success of this approach in identifying and isolating the gene for Duchenne muscular dystrophy bodes well for ongoing similar efforts in Huntington's disease and familial Alzheimer's disease and in many of the biochemically determined storage diseases of childhood. There is preliminary evidence of gene abnormality expression even in non-familial Alzheimer's disease. Understanding the specific defects at the molecular level will allow definition of the biochemical pathology producing the clinical manifestations of these diseases. In turn, this knowledge should indicate directions toward appropriate therapies. Though genetic engineering to replace defective genes with healthy ones may give promise of ultimate cure of these inherited problems, much work needs to be done before this approach can be realistically employed in humans. As a result of molecular genetic research, genetic linkage markers to identify those persons at risk for inherited diseases should be available in the near future, and provide both for early diagnosis, before clinical expression, and for beneficial genetic counseling.

Question. There is evidence that 40% or more of AIDS victims suffer from neurological disorders caused by the virus. In some cases these neurological deficits are the first clinical manifestations of AIDS. The brain may also provide a protected environment for the virus. Dr. Goldstein, we understand that AIDS can seriously affect the brain. What are you doing about this?

Answer. In June 1986, NINCDS issued a Program Announcement requesting grant proposals to study AIDS dementia and other AIDS-associated neurological disorders. There has been a marked increase in grant applications in this area and expect this responsive interest to continue and grow. Significant progress has been made by NINCDS grantees in characterizing the neurological and behavioral features of the AIDS dementia complex and the peripheral nervous system manifestations. Studies of AIDS patients utilizing PET technology have disclosed a reduction in brain metabolism, mostly in the white matter, basal ganglia, and brain stem, with relative sparing of the cortex. Serious neurological complications of AIDS include infections by opportunistic micro-organisms that do not often invade the normal brain and by a lymphoma tumor that is rare in immunologically normal individuals but seen frequently in AIDS and in patients otherwise immunosuppressed, as after organ transplantation. These complications are difficult to manage and are also the subjects of intense investigation. There is great concern that the brain, protected by the blood brain barrier, may

provide a reservoir for the AIDS virus that will be hard to reach and to eradicate by vaccines or antiviral drugs.

PARKINSON'S DISEASE

Question. A "tailored" street drug, designated MPTP, has been shown to produce Parkinson's-like degeneration in the brain. This model has led to a dramatic increase in understanding of this disorder. Current research includes testing of brain tissue implants in animals with MPTP induced Parkinsonism to restore brain function. Dr. Goldstein, what progress has been made in understanding the neurochemical basis of Parkinson's Disease?

Answer. A deficiency of the chemical neurotransmitter, dopamine, is primarily, though probably not exclusively, responsible for the clinical manifestations of Parkinson's disease. The dopamine-producing cells of Parkinson patients progressively disappear. We now know that the toxin MPTP selectively kills these cells. Recent studies in animals and in humans support hypotheses that may implicate toxins to explain the progressive loss of dopamine-generating neurons in the naturally occurring disease. Oxidative metabolism of compounds like dopamine results in the formation of hydrogen peroxide and other highly reactive and potentially toxic substances called free radicals. These radicals can produce nerve cell damage. The monoamine oxidase enzymes that control the production of these radicals may be increased in Parkinson's disease. Moreover, compounds that protect against oxidizing free radical damage are reduced in the Parkinson brain. Inhibitors of monoamine oxidase prevent the toxic effects of MPTP in animals. These and other biochemical observations are the conceptual basis for our initiation this year of a large clinical trial of a monoamine oxidase inhibitor drug and an anti-oxidant that will be studied for their potential to slow the progression of early Parkinson's disease.

Implantation of dopamine producing cells of the fetal brain or of the adrenal gland into the brains of adult non-human animals has helped reverse the effect of MPTP toxicity and lesions of the dopamine producing neurons due to other causes. Implantation of adrenal tissue by foreign investigators has also been attempted in humans with Parkinson's disease, with limited success to date. With further development, however, this approach may come to be used to treat Parkinson's disease and other human neurodegenerative disorders.

HEARING DISORDERS RESEARCH

Question. Substantial efforts are being made in research on hearing disorders. These include more detailed understanding of the anatomy of the ear; causes for the vulnerability of hearing to the effects of aging; improved hearing aids; cochlear implants; and tactile stimulation. Dr. Goldstein, we are impressed with the work being done on hearing disorders. Please tell us how this work can be or is being translated into clinical applications.

Answer. Hearing scientists have been impeded in their work by the fact that the inner ear is relatively inaccessible to research study; it is encased within the most dense bone in the

human body and entering it has always, in the past, caused irrevocable damage to delicate inner ear structures.

Scientists have learned how to avoid this problem and studies of the inner ear are now moving ahead more rapidly. While some of the work holds promise for future prevention and treatment of hearing disorders, other studies are already proving their worth in the clinical realm.

The cochlear implant is a good example. Basic scientific studies, many of which were supported by NINCDS grants or contracts, have led to the manufacture of a variety of electronic devices which are being implanted into the inner ears of profoundly deaf adults. As a result, many are hearing sound for the first time in years.

Cochlear implants are also being used with profoundly deaf children; however, Institute-supported studies are now in progress to determine whether the implants are as effective in very deaf children as they are in many adults.

Studies of the mechanisms of the inner ear have improved our understanding of normal and disordered hearing. This has led both to the development of more effective aids for the hearing impaired and to dramatically improved methods of prescribing hearing aids. The result has been that now hearing aids are modified to suit the hearing impaired patient rather than the patient being adjusted to match the hearing aid.

Surface measurement of the electrical potentials of the brain are being used to predict the development of bilirubin damage to the brains of newborn infants (the result of blood incompatibility between mother and infant). When damage is predicted, prompt treatment will often avert hearing damage and mental retardation.

Other examples of scientific study being translated into the clinical realm include: studies and definition of the risk of damage to the inner ear by some varieties of antibiotics and other medications; the demonstration of the uselessness of the popular antihistamine-decongestant combination commonly used hitherto in the treatment of otitis media in children; and the development of means of diagnosing the presence of commonly occuring fluid leaks between the inner and middle ears.

JAVITS CENTERS AND AWARDS

Question. Over the last several years, the Congress has taken the initiative for establishing Jacob Javits Centers of Excellence and Awards for Javits investigators. Dr. Goldstein, what progress has been made with the Javits centers and awards?

Answer. To date, we have awarded four Javits Centers of Excellence in Neuroscience and 205 Javits Investigator Awards. The Centers of Excellence Program was announced as a one-time competition, from which the four awards were made in Fiscal Year 1985, each with a commitment for an additional four years. The further development of this program has been postponed.

The Javits Investigator Awards Program is a continuing

program, whereby at each of our three National Advisory Council meetings per year, applications for regular research grants already under competitive review are reviewed and a selected few chosen for these designated awards. Awards are made to senior investigators with a distinguished track record who are working on the forefront of some field of neuroscience or communicative science, and who have received an excellent rating on their current competitive proposal. This program began in Fiscal Year 1984; we are currently making about 60-75 new Javits Investigator Awards each Fiscal Year.

Question. Are they useful mechanisms?

Answer. We believe that the Javits Centers of Excellence Program is very useful in stimulating collaborative efforts of very excellent senior investigators which are expected to lead to important findings. There remain opportunities for additional Javits Centers of Excellence.

We are highly enthusiastic about the Javits Investigator Award Program. The availability of a commitment for seven years of support (rather than the more usual 3-5 years) reduces the time spent in preparing and reviewing applications, and provides for a more stable research environment. Additionally, this program has been highly regarded by neuroscientists and communicative scientists, and is almost universally looked upon as a high honor for the investigator given the award, and a significant and worthy memorial to Senator Javits.

PROGRESS IN ARTHRITIS

Question. After years of research we seem to be no closer to understanding either the cause or cure of arthritis. Arthritis is the leading cause of industrial absenteeism and after heart disease the second leading cause of disability payments.

Would mounting a more concentrated and determined research effort accelerate our understanding of this disease?

Answer. You are quite correct in your assessment of the seriousness of arthritis and the enormous toll it takes on our Nation, in human suffering and in economic costs. Statistics indicate that arthritis and other rheumatic diseases comprise America's number one group of crippling diseases. They afflict more than 36 million Americans, and over seven million are disabled by these diseases.

More than 100 kinds of arthritis and related disorders have been identified, including rheumatoid arthritis, osteoarthritis, juvenile arthritis, systemic lupus erythematosus, gout, spondylitis, and many inherited and acquired connective tissue disorders, such as scleroderma. I am pleased to report that we have made substantial progress in understanding and treating many of these forms of arthritis, including such notable examples as Lyme arthritis. Of course, a more concentrated and determined research effort could be expected to yield an accelerated understanding of these diseases. I believe we are making maximal use of the resources we have and are supporting numerous excellent research investigations that will

provide important answers to addressing this important national problem.

RHEUMATOID ARTHRITIS

Question. Doctor Shulman, what advances can you report to us this year from research on rheumatoid arthritis?

Answer. Research on the causes of rheumatoid arthritis has entered a phase of increased productivity. The search to identify infectious agents that trigger or initiate rheumatoid arthritis continues. A recent study has led to the recognition of a virus with unusual properties and a provisional link with human rheumatoid arthritis. The virus has now been identified as a DNA parvovirus and designated as RA-1. Moreover, in a recent study of an epidemic of parvovirus infection in England, inflammatory arthritis was a prominent feature.

There has been a significant step forward in basic genetic research on rheumatoid arthritis. This past year researchers havae identified two new DNA fragments that pinpoint the precise sites on the human chromosome where susceptibility to rheumatoid arthritis resides. Other investigators have succeeded in cloning the gene for rheumatoid factor.

Another promising area of research includes a pathogenetic role for the nervous system. Substance P, a peptide neurotransmitter released from pain-producing nerve endings, has been shown to promote joint inflammation.

There are encouraging reports on treating rheumatoid arthritis. A mechanism by which gold compounds may combat arthritis has been discovered. New evidence suggests that gold compounds exert their beneficial effects by blocking the production of collagenase. Low dose methotrexate, an immunosuppressive agent developed for treating cancer, has also been found to be very useful in the treatment of refractory rheumatoid arthritis.

OSTEOPOROSIS

Question. Doctor Shulman, osteoporosis is a rapidly growing national problem that takes a large toll in human suffering and is a sizable economic burden for our Nation. What are your plans in your new Institute for addressing this important problem?

Answer. The NIAMS has targeted osteoporosis for special research emphasis in many ways, including:

The Scientific Workshop on Osteoporosis, held in February 1987, at the NIH, was co-sponsored by NIAMS, NIA, NIDDK, and the Osteoporosis Foundation. More than 700 health professionals and researchers attended. The Workshop focused attention on many facets of osteoporosis; it assessed the current state of knowledge, identified additional information needed, and generated specific recommendations for future research in: (1) cellular mechanisms; (2) risk factors; (3) bone mass measurement; (4) calcium; and (5) prevention and treatment of osteoporosis.

A Request for Applications for Programs of Excellence of

Research on Osteoporosis, issued jointly by NIAMS, NIA, and NIDDK, is seeking applications for coordinated multidisciplinary research in osteoporosis, including basic mechanisms leading to abnormal bone metabolism; means for accurate assessment of quantity and quality of bone; epidemiology and determining risk factors; preventive measures for various age groups; and treatments to restore structurally competent bone to the skeleton.

A Program Announcement, "Research on Bone Active Hormones and Cytokines," was issued by NIDDK and NIAMS. This solicitation is intended to stimulate research in the development of new or improved in vitro systems with which to study effects of hormones and cytokines which affect bone metabolism. It is also intended to stimulate investigation utilizing new or existing in vitro systems of the mechanism of action and interactions of hormones and cytokines known to regulate bone metabolism and to identify other potential bone active agents.

A new clinical trial is beginning in FY 1987: Postmenopausal Estrogen and Progestin Intervention (PEPI). The NIAMS is a partner in this multi-Institute research plan for a comprehensive investigation of the effects of estrogen and progestin on a variety of outcomes, including lipoproteins, bone mass, and gallstone formation. This comprehensive study is co-sponsored by NHLBI, NICHD, NIAMS, NIA, and NIDDK.

Congress provided funds in the NIAMS FY 1987 appropriation for nine Specialized Centers of Research (SCORs), three each in three areas of national importance: osteoporosis, rheumatoid arthritis, and osteoarthritis. The response from the research community has been gratifying; a number of applications have been received and they are well balanced among the three research areas.

SYSTEMIC LUPUS ERYTHEMATOSUS

Question. Doctor Shulman, this Committee has been interested for many years in lupus, as you know. We were encouraged to hear you report a brighter outlook for lupus patients but are concerned to learn from your opening statements today that black women have much higher prevalence rates and earlier peak ages of mortality from lupus. Can you tell us what your Institute has done and plans to do to address this important disease?

Answer. Our understanding of systemic lupus erythematosus (SLE) has increased greatly in recent years as a result of basic research in immunology and genetics. Lupus is a chronic, inflammatory connective tissue disease involving several organs of the body. It is considered an autoimmune disease, characterized by antibodies reacting against self.

Epidemiological data on lupus indicates that lupus is three times more common in black women than white women. Moreover, the age of onset of lupus is earlier for blacks than for whites and the peak age of mortality from lupus is also earlier. This had been previously attributed to socioeconomic factors, such as poor access to medical care. However, investigators performing a recent, thorough epidemiological survey of lupus in Alabama analyzed these factors and could not correlate socioeconomic factors with the increased prevalence in black women. We do not know why

lupus is more common in blacks. We need to continue to pursue further research in this area.

Another interesting finding to report to you this year comes from a new study of identical twins. It was found that in only 23 percent of those twins studied did both twins have lupus. This finding warrants a search for a non-genetic or environmental cause of lupus.

With earlier diagnosis and improved therapy, the outlook for patients continues to improve. Now, over 90 percent of people with lupus survive 10 years after diagnosis. One interesting recent finding suggests that fish oils may be beneficial.

In an exciting advance in this field, antibodies against a specific part of another antibody, the idiotypic part, have been shown to be useful in the diagnosis of lupus. Patients with lupus produce autoantibodies directed primarily against DNA. In 90 percent of the lupus patients tested, a monoclonal anti-idiotype, 3I, recognizes an idiotype common to anti-DNA antibodies. The idiotype varies with the disease activity in patients and is highly specific for SLE. Only one of several hundred normal individuals tested positive. In addition, it was recently shown that 3I positive anti-idiotypic antibodies were detected in family members of SLE patients in whom no clinical history of SLE was apparent. This, therefore, provides a marker of susceptibility for lupus.

New insights have also been achieved in another special form of lupus, neonatal lupus. A mother who has lupus or lupus antibodies can produce neonatal lupus in her newborn infant. The two main features associated with this disease are skin rash and cardiac arrhythmia, an irregularity in the heartbeat. Recent studies have shown that human neonatal heart tissue as well as skin tissues have a common antigen, the Ro antigen. Anti-Ro antibodies are found in the mother of an infant with neonatal lupus. This strongly suggests that the skin lupus lesion and cardiac defects are the result of the passage across the placenta of a factor, perhaps this anti-Ro antibody. These findings allow early diagnosis of these patients and will be able to assist clinicians in determining the best therapeutic interventions at the earliest possible time.

There are, therefore, a wide variety of promising avenues of research being pursued, including the immunologic, genetic, environmental, and hormonal factors that will help us understand the cause of lupus, as well as important studies of effective treatments and, we hope, ultimately means of preventing lupus.

IMPLEMENTATION OF P.L. 99-158

Question. Doctor Shulman, the legislation which established your new Institute had quite a few requirements for new or expanded activities, and for reports. Can you give us an update on your progress in addressing these requirements?

Answer. As you have indicated there were numerous requirements for new or expanded activities, and for reports, in the legislation. I am pleased to report that substantial progress has been made in addressing these requirements and the Institute as a whole is coming together very well.

Let me outline the major requirements of this legislation as it relates to our Institute and indicate the progress we have made to date:

- o National Program and Plan: The scope and the importance of the Plan are quite large and we are proceeding with careful thought in advance. We are currently soliciting advice from a number of sources, including our National Advisory Council as well as some of the leading experts in the fields of arthritis and musculoskeletal and skin diseases. We believe this careful evaluation up front will pay off in a first rate plan in the future. We view this as one of the most significant dimensions of the legislation and we are excited about the challenge and promise it offers our new Institute.

- o Data System/Clearinghouse: The scope of the ongoing arthritis Clearinghouse is being expanded to include musculoskeletal and skin as well.

- o Interagency Coordinating Committees: The Secretary has established Coordinating Committees in Arthritis and Musculoskeletal Diseases and in Skin Diseases.

- o Centers: The designation of our very successful Multipurpose Arthritis Centers has been expanded to include musculoskeletal diseases as well.

- o National Arthritis Advisory Board: New appointments have been made to the Board, including representatives from the Skin Diseases community. We look forward to working with the new and continuing members of the Board and value the expert advice they offer.

- o Lupus Coordinating Committee: As required, the Committee has been established, has held four productive meetings, and we are in the process of writing the report to Congress.

- o National Advisory Council: I am pleased to report that the Secretary has established an excellent Council. The Council had its first meeting in February. The expertise and quality represented in this very important group are most impressive and we are anticipating great benefit from our working with this very able and talented Council.

MOLECULAR BIOLOGY

Question. Doctor Shulman, I understand that your Institute sponsored a very successful Conference at the NIH recently related to molecular biology. Can you tell us about this rapidly emerging area of science and what you see as the promise it offers?

Answer. NIAMS-supported scientists are in the vanguard of multidisciplinary research in biochemistry, immunology, genetics, virology, and other fields to discover causes and treatments of the many forms of arthritis. Cooperative multidisciplinary efforts central to understanding the rheumatic diseases will focus on genetic predisposition and immunogenetic relationships. The Institute will also continue to exploit the latest advances in

biotechnology, whose potential applications in selected rheumatic diseases are being explored with leading researchers in the field.

This NIH Conference to which you referred, "Molecular Biology: Its Potential for Advancing Rheumatology Research," was exciting and unique. It brought recent advances in molecular biology to the attention of investigators, research associates, and budding researchers in training. The program included an overview of molecular biology, and gave special emphasis to immune-mediated diseases, metabolic diseases, connective tissue diseases, and new scientific frontiers. This Conference is expected to have a major impact on research in rheumatology as it determined what potential breakthroughs might be made by more rapidly focusing such techniques on arthritis research. The Conference was enhanced by the participation of not only the leading investigators using these techniques to study rheumatic diseases, but also renowned molecular biologists working in other fields, to discuss the potential application for these techniques and specific directions for future research.

INFANT MORTALITY

Question. The U.S. currently ranks 16th among the nations of the world with regard to infant mortality. This unacceptably high rate is linked to, among other factors, pregnant mothers who smoke and low birth weight babies. What can be done to reduce infant mortality in America?

Answer. Further reduction of infant mortality in America can be accomplished in part by applying what we have learned from research, but major improvements can only be achieved through the acquisition of new knowledge. Through research it will be possible to improve our ability to overcome the conditions responsible for infant death. Low birth weight (LBW) newborns constitute a significant at-risk group for infant mortality. Nearly two-thirds of all infant deaths occur among LBW infants. We must learn why babies are born too soon or too small and how we can prevent that from occurring. For this reason, the National Institute of Child Health and Human Development established an initiative focusing on prevention of LBW and infant mortality. This effort encompasses two new Perinatal Emphasis Research Centers with emphasis on the identification of causes for intrauterine growth retardation and premature labor, the assessment of treatment modalities and of possible measures of prevention. Two research networks were established, one comprised of seven neonatal intensive care units, the other of seven maternal-fetal medicine units, and will permit a faster, more effective system for evaluating treatments currently used to combat a variety of prenatal and newborn health problems. In addition, we are participating in a major effort to evaluate prenatal care; have initiated a large clinical trial investigating the relationship of vaginal infections to prematurity; are supporting the Better Babies Project here in the District of Columbia; have supported research that resulted in breakthroughs in the use of surfactant to treat Respiratory Distress Syndrome and other newborn immature lung conditions; and have expanded our effort in Sudden Infant Death Syndrome.

Question. Sudden Infant Death Syndrome, or crib death, is the leading cause of death in infants after the first month of life. How

does the Sudden Infant Death Syndrome affect our infant mortality rate?

Answer. Data from 1985 show that sudden infant death syndrome accounted for approximately 6,000 of the 39,500 deaths during the first year of life - or over 15 percent of total infant mortality. The ability to prevent SIDS would make possible a significant reduction in infant mortality.

SUDDEN INFANT DEATH SYNDROME (SIDS)

Question. What is NIH doing about SIDS?

Answer. The NICHD, which has primary Federal responsibility for SIDS research, is pursuing a comprehensive SIDS research program which is seeking to expand the base of knowledge: to understand the causes and underlying mechanisms of the syndrome; to identify infants at risk for becoming victims; to explore preventive approaches; to clarify the relationship between high-risk pregnancy, high-risk infancy, and SIDS; and to elucidate the psychological impact of a sudden and unexpected infant death on parents, siblings, and the extended family.

Question. Is NIH SIDS research making progress in fighting this killer?

Answer. New knowledge derived from the completed NICHD epidemiologic SIDS study has enabled dismissal of several suspected factors; e.g., DTP immunization is not linked to SIDS, SIDS is not caused by choking or neglect, and generally it is not contagious or hereditary. Eight new grants were funded in FY 1987 in response to a recent special Request for Applications. They focus on the most promising area of SIDS research - neural control of cardiorespiratory function, particularly at the brainstem level.

PEDIATRIC AIDS

Question. Florida has the second highest number of pediatric AIDS cases in the Nation. How does the course of the disease and treatment of children differ -- if at all -- from that of adults?

Answer. AIDS and other HIV infections in infants and children differ significantly when compared to that of adults. The majority of children with AIDS acquired this disease by transmission from their mothers. These perinatally infected children go onto full-blown AIDS more rapidly than adults (i.e. the interval between time of infection and onset of actual AIDS is shorter in the infant than in the adult). It is likely that a higher percentage of infected children will ultimately have AIDS than infected adults. Children have a more significantly impaired B-cell function than adults, resulting in life-threatening bacterial infections being more of a problem for infected children. Children infected by the virus have developmental delays (physical and neurological) not seen in the already developed adult. In fact, we may be looking toward the day when HIV is a significant cause of mental retardation in children in the U.S. Infected children are more difficult to assess than adults. The antibody to HIV they have may be a passively acquired antibody from the mother. While antibodies in adults are generally interpreted as a sign of infection, HIV antibodies in infants up to

15 months can simply be passively acquired from the mother. Thus, the status of antibody-positive infants is more uncertain than that of adults. In terms of treatment, several pediatric AIDS centers are prophylactically treating children with intravenous gamma globulin because of the cell defect seen in children. The antiviral therapies undergoing evaluation in adults have reached more advanced stages of testing than these same drugs in children because of the extraordinary care which must be applied to testing drugs in children. Thus, the treatment of AIDS in children is not as far along as in adults.

Question. Can an immune system be developed in an HIV infected infant?

Answer. The development of the immune system in HIV infected infants is a subject of very meticulous study at the present time. Certainly there are children who are infected in utero who are severely immune deficient. There are other children who appear to be less immunologically compromised. However, additional study (now under way) will be required before the full spectrum of immune defects or capabilities in infected infants can be described.

Question. What have we learned about how AIDS can be transmitted to children?

Answer. HIV can be and has been transmitted to children by: perinatal infection from the mothers, contaminated blood and blood products, breast milk, human bite by an infected person, and sexual abuse by an infected adult. A child also could be infected by a contaminated needle, but there are no published reports describing this to our knowledge.

AIDS RESEARCH

Question. What research is NIH doing on AIDS, particularly on how children are infected by AIDS virus?

Answer. The NICHD is currently: 1) studying the transmission of HIV infection from mother to child; 2) studying and describing the full spectrum of HIV infection in children; 3) assessing the immunologic defects in infected pregnant women and their children; 4) studying in order to validate or refute the HIV fetopathy/embryopathy syndrome; 5) studying the prevalence of HIV infection in newborns in one geographic region of the country; 6) studying the outcome of infected hemophiliac children; 7) supporting the development of new screening tests for newborns; and 8) studying methods for earlier diagnosis of infection in infants.

PROGRESS IN NEONATAL MEDICINE

Question. I am particularly interested in new knowledge regarding treatments developed for premature infants that are mentioned in your statement -- such as the use of human surfactant as a lung lubricant and the risks associated with the drug heparin. What new successes can you report in neonatal medicine, and what impact will those successes have on reducing our national infant mortality rate?

Answer. New therapeutic modalities to treat premature infants

that have been suggested to be effective through individual small research studies need to be confirmed and assessed in a large at-risk population. An important arena to achieve this purpose is the establishment by the National Institute of Child Health and Human Development of the network of seven neonatal intensive care units. Several important issues can be studied systematically (e.g., the use of IV gamma globulin to prevent infections; the determination of the most effective treatment for persistent fetal circulation; the use of intravenous Vitamin E to prevent severe intracranial hemorrhage) and results will impact on the care of the affected infants and prevent their death. In the long range, the benefit will be the reduction of the national infant mortality rate.

BIRTH DEFECTS

Question. The NICHD studies normal growth and development in order to gain knowledge toward prevention of birth defects. Can you give some examples of recent research advances in this area?

Answer. Each year one-fifth of all infants in the United States who die by the age of four, die because of inherited defects. Also, of spontaneously miscarried pregnancies, a major proportion are associated with developmental abnormalities. These numbers make up a significant proportion of the seven percent of all babies born in the United States each year with mental or physical defects.

1) An understanding of the genetic control of human cellular and molecular development is essential for understanding normal and abnormal human developmental biology. Current studies are revealing the mechanisms that regulate the genes controlling development which includes how genes are sequentially turned on and off and how this switching is temporally ordered.

2) Certain pieces of genetic information (DNA) are essential for the proper development of segmentation within an organism. Experimental evidence demonstrates that these pieces of DNA are identical in many evolutionarily distinct organisms (i.e. flies, frogs, mice, humans). Such observations suggest that these unique pieces of genetic information are critical for the normal development of virtually all animal species. Knowledge of how these pieces of DNA are regulated is providing significant insight into our understanding of basic development.

3) The surfaces of all cells contain information that is important for determining what such cells should do during development. Since cells move around during normal development, changes in the architecture of cell surfaces will influence how all cells will behave. Recent advances in identifying the chemical nature of cell surface molecules is increasing our understanding of how cells, through their surface architectures, normally interact with other cells and extracellular material.

4) Connective tissues were once considered inert, relatively uncomplicated and uninteresting tissues that were rarely involved in disease. This concept has changed dramatically as the various constituents of connective tissues have been progressively characterized over the last fifteen years.

5) Collagens are the most abundant proteins of the body. They

were once considered a single structural protein that imparted strength to such tissues as bone, tendon, skin, intervertebral discs, reticular fibers of organs, body walls of vessels and surfaces of a variety of cells. They are now known to be a family of at least nine proteins that exhibit substantial structural, biochemical and functional diversity. The collagen genes responsible for each protein are also being identified and characterized for comparisons with abnormal collagen genes of disease.

ADOLESCENT PREGNANCY

Question. One million adolescents become pregnant in the U.S. each year. What do we really know about teenage pregnancy and childbearing in this country?

Answer. The proportion of unmarried women under 20 years of age who are sexually active increased substantially in the 1970's. In 1982, the last year for which we have data, it was 43 percent, compared with 27 percent in 1971. There is some evidence that the increase slowed down after 1979, but we will have to await the results of a new survey before we have more current information. Pregnancy rates among the sexually active, however, have declined about nine percent between 1974 and 1982, suggesting that the use of contraception among unmarried teenagers has improved. In 1982, 70 percent of teenagers at risk of pregnancy were using contraception, compared with 80 percent among older women. For a variety of reasons (decrease in number of teenagers, increased use of contraception, and increased numbers of abortions) the number of teenage births has declined to just under 500,000 per year, and the proportion of all births that are to teenagers has decreased from 18 percent in 1970 to 13 percent in 1984.

Research supported by this Institute has shown that the period of highest risk of unintended pregnancy is shortly after first intercourse. Pregnancy rates are very high in the absence of contraceptive use. We are beginning a major project to study factors related to initiation of sexual activity and contraceptive use among teens as a result of these findings.

A great deal of the research we support deals with the complex chain of events that lead to pregnancy at young ages. We have found that a variety of personal and social factors are related to each link in this chain. For example, the decision to engage in sexual relations is related to family stability, poverty, school achievement, physical maturity, peer culture, and many other influences. Similarly, the decision to use or not to use contraception is associated with these and other factors, as is the decision to terminate or continue a pregnancy and to seek or not to seek prenatal care. Although we know a great deal more than we did 10 years ago, there are still many gaps in our knowledge, and we shall continue to pursue new knowledge aggressively.

Question. How is our research in this area contributing to efforts to reduce the problems associated with adolescent pregnancy?

Answer. We believe that a major effect of our research on teenage pregnancy and childbearing has been a heightened awareness of the harmful consequences of these phenomena and increased motivation on the part of communities and public and private agencies to

initiate programs to deal with their causes and results. An important part of our research program studies the consequences of teen childbearing for the mothers, babies, and other family members. Although the consequences are uniformly deleterious (for example, curtailed education and lower earning power for the mothers, poorer health for the babies, and added burdens for the mother's family and for community resources), they can be ameliorated somewhat by a variety of educational, health, and social interventions. For example, recent research has shown that the higher neonatal mortality rates among babies born to teens result largely from their low birth weight. Because low birth weight is often the result of little or no prenatal care, this finding emphasizes the importance of health programs that will encourage and enable pregnant teenagers to begin prenatal care early in pregnancy.

CONTRACEPTIVE DEVELOPMENT

Question. In order to increase the options for the voluntary regulation of fertility and to reduce the proportion of unplanned pregnancies, an array of methods that are safe, effective, inexpensive, easy to use, and acceptable must be available. What is the NICHD doing in the area of developing new and improved methods of contraception?

Answer. For a number of years the NICHD has sponsored an extensive program designed to develop new methods of fertility regulation. We have had an active program of research into the development of new barrier methods of contraception which should make them more attractive to the users. We have developed and are currently testing new injectables and implants for female contraception. We are continuously searching for new drugs and approaches which can influence male fertility. We are heavily involved in the isolation of natural substances, such as inhibin, that influence reproductive function and may be of value in fertility regulation. In view of this long-standing commitment to research on development of new and improved methods of contraception, the Institute, in FY 1986, launched a special contraceptive development initiative. The initiative involves (1) basic biomedical research in human reproduction intended to discover possibilities for modifying reproductive processes that may lead to the development of new contraceptives; (2) the development and testing of new methods that can be used by the general population; (3) studies of the safety and effectiveness of methods that have been used in the U.S. or other countries in order to determine whether they may gain more wide-spread use; and (4) research on behavioral aspects of contraceptive use to determine why many couples do not use contraception when pregnancy is not desired and to identify the characteristics of methods that may make them more acceptable to various population groups.

CHILDHOOD INJURY

Question. Accidents are the leading cause of death and disability in children and adolescents in the U.S. More children die from accidents than from all childhood diseases combined. How can research help us to prevent injuries, especially among children and adolescents?

Answer. Descriptive epidemiology establishes that childhood

injuries are not randomly distributed among the population but are predictable and occur in accordance with factors which increase susceptibility of segments within the population. For instance, the injury rate rises rapidly in the first year of life and peaks again in adolescence. Some common injuries demonstrate a relationship with male sex, family income, season of year and other factors. Such non-random occurrences strongly suggest that causative factors might be identified and altered and that susceptible populations can indeed be identified for intervention strategies.

Numerous strategies for injury control have been attempted with varying degrees of success. A recent review of causes of traumatic death in children under age 15 identified 12 currently available prevention strategies which if used could reduce childhood deaths from trauma in the U.S. by 29 percent. Ultimately, injury control must entail some degree of behavior modification by parents, legislators, judges, juries, police, educators, physicians, and/or children themselves. Research on how to bring about safety-related behavioral change is greatly needed and can identify the conditions under which behavior change can be expected. Researchers in childhood injury and behavioral sciences have recently identified important and researchable questions for investigation which can help effect reductions in childhood injury. By what means or mechanisms are various risk factors associated with increased injury and non-injury? How does development of the child and the interaction of the environment and family in relation to this development contribute to child safety and/or injury? What are effective approaches to influence parents and communities to recognize hazards and insist on change to produce safe products and environments? How do children learn behavior that applies to the occurrences or reduction of childhood injuries? What are the needs and interventions to prevent childhood injuries that are specific to individual communities?

Question. What injury prevention research is being supported by the NICHD?

Answer. Research on risk-taking behavior in general has been an ongoing interest and activity of the NICHD. Until recently the Institute has had no program specifically addressing childhood injury. Currently, two projects with a total cost of $388,251 over two years comprise the research supported by the Institute which is specifically directed at childhood injury. These projects deal with home hazards. One is designed to assess the relationship between home hazards and childhood injuries and to analyze the behavior of parents and children in the presence of real and contrived hazards. The second uses a detailed analysis of factors existing within families to maintain a child's safety. To help promote the development of research on injury prevention, the NICHD in 1985 issued a special request for grant applications in this field and in 1986 conducted a workshop to (1) formulate important questions for research; (2) identify key methodologies needing further development; and (3) provide stimulation and guidance for potential investigators regarding approaches to childhood injury research.

DOWN SYNDROME

Question. Mental retardation is a major public health problem and Down Syndrome seems to be one of the leading causes. What is the NICHD doing in this area of research?

Answer. For the past several years, the Institute has been supporting a contract on the development, maintenance, and distribution of a mouse model for Down syndrome. Recently, an NICHD-supported research team has shown that the animal model possesses neurochemical and anatomical defects that are similar to the abnormalities commonly found in persons with Down syndrome. The research team found specific heart and brain defects, blood abnormalities, and inner-ear malformations in the mouse model that are comparable to the anatomical changes in children with an extra chromosome 21. New insights into the molecular defects in Down syndrome have also been found. Institute-supported investigators, in collaboration with scientists from the National Cancer Institute, discovered a new gene near the distal end of chromosome 21 that they have identified as a proto-oncogene -- a gene present in normal development which may play a role in the causation of cancer if it is "turned on" at the wrong time. This gene, called ets-2, was also mapped on the distal end of mouse chromosome 16. Further studies of this gene may reveal why Down syndrome children have a 20- to 50-fold increased risk of developing leukemia.

Individuals with Alzheimer's disease and adults with Down syndrome develop progressive abnormalities of behavior and gradual loss of memory. A major pathological change in the brain of afflicted individuals includes deposition of a protein called amyloid in the neuritic (senile) plaques and the walls of cerebral blood vessels. Last November three groups of investigators independently mapped the amyloid gene on human chromosome 21. Recently, NICHD-supported investigators demonstrated the amyloid gene on mouse chromosome 16.

In May of this year, the Institute will convene a workshop on the mapping of the genes on human chromosome 21 and mouse chromosome 16. Leading molecular biologists and geneticists from the United States and abroad will discuss the current state of knowledge about gene mapping and will provide guidance and advice to the Institute about promising research approaches that deserve to be explored and supported.

Parents' responses to infants' signals appear to have substantial effects on childrens' cognition, language, and social development. Down syndrome infants have been shown to differ from normal infants in patterns of interaction with their mothers. The Institute is supporting research on interactions between Down syndrome infants and their caregivers to determine the relationship between language development and early social interaction patterns, and to pinpoint aspects of parent-child interactions in which interventions may have the greatest likelihood of success.

LEARNING DISABILITIES

Question. Learning disabilities affect an estimated 15 percent of the U.S. school-age population. What is the role of biomedical and behavioral research in increasing our understanding of how to prevent and treat learning disabilities?

Answer. The NICHD has taken a multidisciplinary approach to research on learning disabilities. More specifically, the Institute has employed an interdisciplinary strategy for addressing questions about learning and the types of disabilities associated with this aspect of development.

Recently, the Institute held a conference on perinatal development that focused upon psychobiological approaches to understanding learning. A book based on this conference entitled "Perinatal Development: A Psychobiological Perspective" will be published in May, 1987. The main theme of the book is interdisciplinary approaches, including biological and behavioral analyses, to gain a more profound understanding of the basic factors that produce learning early in life.

The Institute also issued a Request For Applications (RFA) on sub-typing of dyslexia in FY 1986. Subsequent to the review, one of the applicants, from Bowman Gray Medical School, was awarded a program project grant to study whether dyslexia can be characterized, by scientific criteria, into diagnostic groupings that would aid researchers in determining the etiology of this learning disorder. A second program project grant on this same topic was awarded to the University of Miami School of Medicine in FY 1987. A hallmark of both these grants is that they utilize an interdisciplinary strategy which employs biomedical and behavioral techniques to understand this complex learning disability.

Question. Are we making any progress in this field?

Answer. Two important leads have developed in our research on dyslexia. First, scientists sponsored by the NICHD have discovered a familial type of dyslexia in which those having the problem show an anomaly on chromosome 15. Work on characterizing where the anomaly lies on the chromosome is now under way by these scientists at the University of Miami Medical School under Dr. Herbert Lubs. Information from this study can help scientists begin to unravel the mechanisms involved in this particular variant of dyslexia.

Scientists working at Beth Israel Hospital under a program project funded by the Institute are developing an animal model for dyslexia. The work is based upon the finding that certain purebred mice strains have an immune deficiency. This anomaly is correlated with neural tangles in the brain that are associated with learning deficits. The hypothesis is that immune deficiencies could interfere with proper organization of brain organization early in life and thereby produce learning difficulties. The researchers hope to induce immunological deficits in other purebred strains of mice to determine whether similar brain disorganization and learning problems will be observed. If this occurs, a model for some learning deficits along with a probable mechanism can be systematically studied.

VACCINE DEVELOPMENT

Question. We have heard reports that the NICHD is developing a very promising new pertussis vaccine. What is the status of this important effort?

Answer. A vaccine for the prevention of pertussis, composed of a single, highly purified protein (pertussis toxin), has been developed by intramural scientists. Pertussis toxin has been inactivated by a novel (patent pending) method to reduce its toxicity to an acceptable level but not its ability to elicit antibodies that neutralize pertussis toxin (anti-toxin). Pertussis toxoid-NICHD is the name of this new vaccine. Phase 1 clinical studies of safety and antibody production have been completed. Eighty adult volunteers at

the Clinical Center, NIH, were injected with three doses of pertussis toxoid-NICHD. None of the volunteers experienced fever, local reactions or metabolic changes. Their levels of post-immunization anti-toxin were considerably higher than children injected with four doses of our current pertussis vaccine (DTP), and slightly higher even than the levels of anti-toxin in adults convalescent from pertussis (it is known that recovery from pertussis confers life-long immunity).

Preliminary information about safety and antibody formation in children is also available. Thirty-three children, previously immunized with the three recommended doses of DTP in infancy, were injected in March, 1987 with pertussis toxoid-NICHD in Boston under the supervision of Dr. George Siber, Children's Hospital Medical Center. No reactions (fever, or swelling and redness at the injection site) were observed. The levels of anti-toxin induced by the new vaccine were considerably higher than those of the controls (children who received a DTP booster) and equal to those in children who had recovered from pertussis. This study is ongoing.

On the basis of this successful and promising evaluation, two large studies of safety and antibody production in children and then infants are planned: one in Boston, and one in Goteborg, Sweden (where there has been no pertussis immunization of any type for some years). Massachusetts manufactures all DTP vaccine for its residents. Accordingly, NICHD has established a collaboration with the Massachusetts Public Health Laboratories and the Children's Hospital Medical Center in Boston to evaluate the safety and protective actions of pertussis toxoid-NICHD. Pertussis toxoid-NICHD will be formulated with the other two components of the DTP vaccine, diphtheria and tetanus toxoids. An expanded surveillance system to identify untoward reactions induced by the vaccines, and all cases of pertussis in Massachusetts, is being developed. It is planned to inject all infants and children (with informed consent) in Massachusetts with either DTPertussis toxoid-NICHD or the current DTP according to a randomized plan. This will involve about 150,000 infants and children, injected over two years and monitored for another two years. Surveillance of this population should provide sufficient information to permit a license to manufacturers of this product, if the results show that the pertussis toxoid-NICHD is safer and at least as effective as our current DTP.

Question. Have there been any developments in the work on new vaccines for Hemophilus influenzae and typhoid fever? Are there any results from the field testing of the new typhoid fever vaccine in Nepal and India?

Answer. The principle of covalently binding the current vaccine for H. influenzae type b, which is composed of a polysaccharide, to a protein, which improves its immunologic activity and makes it potentially effective in infants as well as children, was developed by intramural scientists at NICHD. This organism is an important cause of meningitis and mental retardation in infants. The product (a "conjugate") made by NICHD, H. influenzae type b polysaccharide-tetanus toxoid, has been found to be safe and to stimulate more antibody formation in children than the current unconjugated vaccine. Studies are under way to evaluate this product in infants in Goteborg, Sweden, and Charlotte, North Carolina.

A study of the safety and efficacy of both the pertussis toxoid-NICHD and H. influenzae type b conjugate vaccines is planned for Goteborg. The study will begin in January 1988, and involve all infants born in Goteborg over a two-year period. The H. influenzae type b conjugate will also be evaluated in Charlotte, North Carolina under the supervision of Dr. James C. Parke, Jr.

A new NICHD-developed vaccine for the prevention of typhoid fever, composed of the capsule (outer covering or "Vi antigen") of the causative agent, has been evaluated in Nepal, assisted by the Agency for International Development and the Walter Reed Army Institute for Medical Research. The Vi vaccine has been shown to be safe and highly effective in preventing typhoid fever in children and adults, ages 5 to 44 years. An improved Vi conjugate vaccine has been developed by NICHD scientists, using the principles developed for H. influenzae type b vaccine, which is planned to be evaluated in Armed Forces recruits in the U.S. The laboratory data indicate that this improved Vi will be safe and should confer protection to infants. It is hoped that this new typhoid vaccine can be incorporated into routine infant immunization in underdeveloped nations.

Question. Will you be able to continue satisfactorily the work on these vaccines in FY 1988 with funds provided in the Budget Request?

Answer. The work on these new vaccines for pertussis, H. influenzae meningitis, and typhoid fever can be continued with the funds provided in the budget request. However, clinical trials are very expensive and results are achieved slowly. The pace of the trials, leading to vaccine commercialization, could be accelerated with additional funds.

ENDOCRINOLOGY RESEARCH

Question. Endocrinology research has increasingly made significant contributions to efforts seeking to solve a broad array of perplexing health problems. In the area of endocrinology, what are the most promising opportunities for developing effective and safe new contraceptive agents?

Answer. Advances in endocrinology have opened new opportunities for fertility regulation. We are focusing on the properties of hormone receptors and finding ways of blocking them. When a receptor for a reproductive hormone is blocked, the reproductive processes that are dependent upon that hormone are also blocked. For example, we are looking at methods that can interfere with FSH action at the testicular level and thus lead to the development of a male contraceptive. We are trying to isolate a variety of large peptides and proteins from ovaries and testes and to ascertain their roles in reproduction. These are just examples of a number of approaches that have endocrinology as a background. Many of these advances require extensive research before we can be sure of their practicality. We are employing the new biotechnology to produce some of these materials for studies in various animal models.

DEVELOPMENT OF A MALE CONTRACEPTIVE AGENT

Question. What is happening in the development of a male contraceptive agent?

Answer. In the area of male contraception we have pursued several approaches. At the clinical level we have examined the effect of various hormonal preparations, such as progestins and androgens, on inhibition of sperm production. More recently, we have examined the effects of LHRH agonists. In view of the limited inhibition that these drugs have produced, their applicability for practical male contraception is severely limited. More recently we have examined the effect of LHRH antagonists on male fertility. In studies conducted in monkeys the antagonists appear to produce a more uniform suppression of gonadal function than was observed with the agonists. We have succeeded in eliminating some of the undesirable side effects of the antagonists and can now proceed with their clinical evaluation. We are, likewise, looking at the potential of utilizing inhibin, as well as immunization against FSH as potential male contraceptives. Utilization of specific sperm antigens as starting materials for male vaccines is also being pursued. We are also developing long-acting testosterone preparations which will be necessary in some of these approaches.

POTENTIAL USES OF INHIBIN

Question. How has the availability of inhibin contributed to this research?

Answer. While the structure of inhibin has been known for over a year, the pure material is not yet available for research. Biotechnology firms are utilizing recombinant DNA technology to produce inhibin, but it is a difficult and time consuming process. In the meantime, we are relying on crude inhibin to gain preliminary information on its potential uses, and have contracted to have it produced and made available to investigators. In the coming year we should generate data which can tell us whether or not inhibin can be used for fertility regulation.

RESEARCH USING SYNTHETIC GROWTH HORMONE

Question. What is the current status of research using synthetic human growth hormone? Have the results been consistent with earlier expectations?

Answer. Studies of synthetic human growth hormone have progressed to the level of clinical trials testing the safety, efficacy, and optimal dosage of the synthetic growth hormone in growth hormone-deficient children. Results thus far indicate: (1) There is a significant dose-response relationship. (2) There is a definite decrease in growth rate with increasing age. (3) The biosynthetic product is just as effective in promoting growth in growth-hormone-deficient patients as the body's natural hormone. (4) Previously untreated growth-hormone-deficient subjects increased their mean growth after treatment with biosynthetic growth hormone.

Some research is now underway to test the efficacy of biosynthetic growth hormone in children who are very short but who appear not to be deficient in growth hormone. Preliminary results from these pilot

studies indicate that about half of these short children do not respond to exogenous biosynthetic hormone, and that about one-quarter of those treated responded with augmented rates of growth that are clinically significant.

Results of treatment with synthetic growth hormone have been encouraging. The increase in growth rate observed in growth hormone-deficient children treated with this product is similar to that observed during treatment with natural growth hormone. The greatly increased supply of synthetic growth hormone should allow the optimization of treatment regimens with this product. The incidence of side-effects and the development of antibodies to the hormone are, at this stage of investigation, comparable to those observed during treatment with the natural growth hormone.

TREATMENT OF CUSHING'S SYNDROME

Question. Tell us about progress you have made in treating Cushing's syndrome.

Answer. The effective treatment of Cushing's syndrome depends, in large measure, upon an accurate determination of the specific cause of the disorder. Recent research in NICHD has dramatically improved our ability to pinpoint the cause of Cushing's syndrome in any individual case. The tools that have been developed for this purpose are the "CRF" test and the "inferior petrosal sinus sampling" procedure. These advances have resulted in an increase in the surgical cure rate of the most common case of Cushing's syndrome (a small pituitary gland tumor) from 50% to nearly 100%. These advances, pioneered by NICHD, are quickly becoming the standard of practice worldwide.

An additional advance has been the application of the new antiglucocorticoid, RU 486, to the treatment of some cases of Cushing's syndrome. Initial studies treating Cushing's syndrome due to a malignant adrenal tumor are promising. Compared to available therapies, this approach appears to offer improved efficacy and fewer untoward side-effects.

CLINICAL TRIALS

Question. Will you be able to fund any new, large clinical trials at the FY 1988 President's Budget Request? Are there trials that you anticipate could be started if additional funds were available?

Answer. At the FY 1988 President's Budget Request, NICHD will not be able to fund any new, large clinical trials. If additional funds are available, it is anticipated that the following trials could be started in FY 1988:

(1) Clinical Trial of Hemophilus influenzae Vaccine. The bacteria Hemophilus influenzae is the most common cause of meningitis and a leading cause of acquired mental retardation in infants and young children despite antibiotics. A vaccine developed some years ago is effective only in older children (who are not the prime candidates for this disease). The newest vaccine appears to be effective in very young infants, but large clinical trials will be necessary to

confirm efficacy and safety. First Year Cost: $500,000; Total Projected Cost: $1,500,000.

(2) Evaluation of Low Dose Aspirin Therapy in the Prevention of Pre-Eclampsia. Pregnancy induced hypertension at its earliest or pre-eclampsia usually appears after the 24th week of gestation. Hypertension is a major cause of maternal and perinatal mortality. Recent studies have shown that daily administration of aspirin, in low doses, has been beneficial in preventing severe manifestations of hypertension. A randomized clinical trial would help in determining the true value of this therapy for this significant health problem. First Year Cost: $1,000,000; Total Projected Cost: $2,500,000.

(3) Therapeutic Antibiotic Trial to Delay Birth and Perinatal Morbidity in Mothers with Preterm Premature Rupture of Fetal Membranes. Controversy exists for the management of patients with preterm premature rupture of fetal membranes. Issues not resolved involve consideration of maternal and fetal advantages and disadvantages regarding prolongation of the latent period. A protocol is being developed to carry out a random clinical trial with the administration of prophylactic antibiotic and tocolytic agents. Outcome measures will consider prolongation of the latent period and reduction in neonatal morbidity and hospitalization. First Year Cost: $1,000,000; Total Projected Cost: $3,500,000.

(4) Evaluation of Vitamin E in the Prevention of Intraventicular Hemorrhage in Very Low Birth Weight Infants. The multicentered Neonatal Intensive Care Network, consisting of seven large neonatal intensive care units, is planning a study to examine the safety and efficacy of using vitamin E in the prevention of intraventricular hemorrhage in very low birth weight infants. First Year Cost: $1,500,000; Total Projected Cost: $3,500,000.

(5) Intravenous Ig Globulin in the Prevention of Neonatal Infectious Morbidity in Very Low Birth Weight Infants. Very low birth weight infants are susceptible to a variety of infections during long stays in neonatal intensive care units. This study will evaluate the use of intravenous Ig Globulin in the prevention of these infections. First Year Cost: $500,000; Total Projected Cost: $1,250,000.

(6) Transdermal Patches for Female Contraception. Contraceptive drugs can be absorbed through the skin. A transdermal route of administration avoids some of the drug inactivation by the liver which occurs with oral administration. Consequently, lower amounts of the drugs can be used. First Year Cost: $250,000; Total Projected Cost: $500,000.

(7) Mental Retardation Research Centers (MRRCs) Network of Clinical Trials. The 12 MRRCs would form a network for collaborative clinical trials in the prevention or amelioration of mental retardation. First Year Cost: $1,200,000; Total Projected Cost: $6,000,000.

(8) Clinical Studies with New Injectables for Female Fertility Regulation. In collaboration with WHO the NICHD has developed several new, long-acting injectable preparations. They appear to have few undesirable toxic manifestations when tested in animals. WHO has initiated clinical studies in several countries and NICHD is planning to initiate studies in the U.S.A. First Year Cost: $200,000; Total Projected Cost: $750,000.

(9) Clinical Study of a New Testosterone Derivative for Male Fertility Regulation. NICHD is involved in the development and testing of two long-acting preparations that can be utilized in the development of male contraceptives and for the treatment of testosterone deficient men. One preparation involves microencap-sulated testosterone which is being evaluated in hypogonadal men by intramural scientists. The other preparation, a long-acting derivative of testosterone, is undergoing toxicological evaluation. The need for these testosterone preparations stems from the fact that many approaches to male contraception will require testosterone supplementation. First Year Cost: $175,000; Total Projected Cost: $400,000.

(10) Clinical Studies with a New Generation of LHRH Antagonists for Male and Female Fertility Regulation. LHRH is a natural hormone that controls reproduction in both sexes. LHRH antagonists are synthetic copies that antagonize the action of LHRH. Studies are planned to assess the potential of these drugs for fertility regulation in both sexes. First Year Cost: $350,000; Total Projected Cost: $1,200,000.

(11) Clinical Studies with a Long-Acting Spermicidal Formulation. A long-acting (24 hr.) spermicidal formulation releasing nonoxynol has been prepared. Assuming that the initial studies are encouraging a clinical trial would be initiated in FY 1987. First Year Cost: $150,000; Total Projected Cost: $350,000.

(12) Induction of Ovulation in Postpartum Lactating Woman with Pulsatile, Intravenous Gonadotropin-Releasing Hormone. Ovulation is suppressed in lactating postpartum women. Initially this is associated with low levels of gonadotropins and high levels of prolactin (PRL) in plasma, suggesting a hypothalamic cause of anovulation similar to hyperprolactinemic amenorrhea. Later in the postpartum period, however, PRL falls and FSH rises, yet folliculogenesis is still suppressed; this suggests that other mechanisms may also be involved in lactational amenorrhea. To study this question, a uniform hypothalamic stimulus using pulsatile GnRH administered via a portable infusion pump will be used to compare the pituitary and ovarian responses in lactating and non-lactating women, in women with non-puerperal hyperprolactinemia due to a microadenoma, and in women with hypothalamic amenorrhea but normal prolactin levels. First Year Cost: $200,000; Total Projected Cost: $600,000.

(13) Dose-Response Relationship Between Thyroxine Dose and Lower Leg Growth Rate in Childhood Hypothyroidism. Thyroid hormone is essential for growth; however, the dose-response relationship between thyroid hormone dose and growth rate is not known. The purpose of the study is to define this dose-response relationship in prepubertal children with primary hypothyroidism, through a randomized double blind study where children will receive two month courses of treatment with doses of thyroxine from 0-6 ug/kg/day. First Year Cost: $200,000; Total Projected Cost: $600,000.

(14) Nutrition, Other Factors, and the Outcome of Pregnancy. The project is identifying causal factors relating to pregnancy and poor pregnancy outcome among lower socioeconomic status inner city minority populations. The clinical trial that will result from this study will capitalize on this information and develop an intervention study to improve the pregnancy outcome in this group. First Year Cost: $150,000; Total Projected Cost: $600,000.

(15) Factors Influencing Breastfeeding. There is a need to analyze the causal factors of the low incidence of breastfeeding in certain populations in the U.S. and to develop intervention studies to improve both the incidence and duration of breastfeeding. This clinical trial is designed to address this critical problem. First Year Cost: $150,000; Total Projected Cost: $600,000.

NICHD/NEUROSCIENCES/PRIMATE FACILITY

Question. Congress appropriated $500,000 in FY 1985 and $4,400,000 in FY 1987 for the design of a building, at NIH, that will house laboratories of the NICHD. What are the current plans for this building?

Answer. The current plan basically calls for construction of a facility that will consolidate some of the programs of the NICHD, and will provide accreditable primate facilities in conjunction with labs, procedure rooms, and support space for research in the neurosciences.

Question. Why haven't funds been included for construction of this building in the FY 1988 request? Were construction funds requested at any level (i.e., NIH, PHS) during the development of the FY 1988 budget?

Answer. Construction funds have not been included in the FY 1988 request because the design phase of the project is not far enough along to warrant the request for FY 1988. Construction funds were not requested at any level, including NIH or PHS, during the development of the FY 1988 budget.

Question. What are the current estimated construction costs for the building and how long will it take, once construction is started, for its completion?

Answer. The current estimated construction cost for the building and support facilities is $86 million, and once construction is started, it should take 2 1/2 years to complete.

GLAUCOMA - SPECIAL PROBLEM AMONG BLACK AMERICANS

Question: Glaucoma is one of the leading causes of visual impairment in the United States and may be the major cause of blindness among Black Americans. What are the risk factors that lead to glaucoma and why is it more prevalent among Black Americans?

Answer: Actual and potential risk factors in glaucoma include age, systemic blood pressure, intraocular pressure, refractive error (especially myopia), family history of open angle glaucoma, history of diabetes, height and weight, history of vascular disease, and tobacco and alcohol consumption. The reason for the increased prevalence of glaucoma that appears to exist among Black Americans is not known at this time. The NEI is currently supporting a study which seeks to determine whether Blacks are in fact more susceptible to glaucoma and, if so, what factors contribute to this racial difference.

CLINICAL RESEARCH

Question: Dr. Kupfer, what steps are you taking to stimulate clinical research to develop new prevention and treatment approaches to eye diseases?

Answer: In 1985 when the Congress appropriated a large increase for clinical trial research, the Institute more than doubled its support for these studies. The two necessary elements were there--the funds and the scientific opportunity. NEI staff have worked closely with investigators as they have designed and developed these studies. Currently, the NEI supports multicenter clinical trials to test the effectiveness of specific treatments for glaucoma, diabetic retinopathy, retinitis pigmentosa, ocular melanoma, and retinopathy of prematurity, to name a few. These trials test known treatments and provide the information needed to develop better approaches to prevention and treatment of eye disease.

In addition, we have several ongoing programs to encourage individuals to conduct clinical research. The NEI has designated physician scientists as a special group to receive grant support under the small grants program and the research career program. Also, for several years NEI staff have coordinated intensive training courses with the objective of teaching physicians and other scientists how to conduct clinical studies that are based on sound assumptions and ask the right scientific questions. These courses also outline correct procedures for designing clinical trials so that they collect the information that is needed to answer the hypothesis being tested, while assuring that treatments are safe. This course has been very successful; there are many more groups of doctors who are interested in conducting scientific clinical studies and now have the expertise to plan and carry out their own studies.

Finally, we are currently developing a new program to enhance our clinical research endeavors. The goals of this new program are to expand capabilities for clinical vision research to a larger number of institutions by providing support--including resources to attract biostatisticians and epidemiologists--to groups with great potential for expanded programs of clinical vision research. Initially, we would like to make six or ten awards for these core facilities for clinical vision research development.

NEW TECHNOLOGIES

Question: Dr. Kupfer, we hear a lot about the new techniques of molecular biology, gene sequencing and gene mapping. How are these technologies being used in eye research?

Answer: Very exciting progress is being made both in understanding normal visual function and in discovering the genetic basis of eye diseases, particularly retinoblastoma, an eye cancer, and retinal degenerative diseases such as retinitis pigmentosa. Isolation of the genes involved and determining which proteins they code for will enable researchers to determine their functions and ultimately to understand the mechanisms of the disease processes. Genetic probes are being developed and tested and should soon become

useful for diagnosis and genetic counseling in families with these disorders.

Retinoblastoma is a malignant tumor that arises in the eyes of newborns or young children. A predisposition to the disease can be inherited. The location of the retinoblastoma gene, Rb, and the sequence of the gene have recently been discovered. This information should almost immediately allow for the production of DNA probes for diagnostic and counseling use to determine which infants are at risk in families with retinoblastoma. A DNA probe has already been used to predict whether retinoblastoma would or would not develop in several infants with a family history of the disease. The test was accurate for five of six infants. Even more exciting, with implications for the whole field of cancer biology, is the discovery of how Rb controls the disease. Rb is the first example of a gene that normally prevents the expression of a cancer. Two copies of the gene are normally present in retinal cells; the cancer develops only if both are missing or defective. In studying the genetic basis of retinoblastoma, scientists are coming closer to understanding the mechanisms involved in the onset of cancer.

The genes that cause two heritable retinal degenerative diseases, a form of retinitis pigmentosa and choroideremia, have recently been localized on the X-chromosome, and these observations should lead to rapid progress in isolating the genes and gaining an understanding of the molecular bases of these diseases. In studies of hereditary diseases, genetic markers (genes coding for known proteins) identified in the families of affected individuals can be used to locate the disease gene on a chromosome. Thus, a DNA probe corresponding to a small fragment of the human X chromosome has successfully been employed to identify the retinitis pigmentosa gene in several families. Reliable clinical use of this technique, however, awaits identification of a marker or markers closer to the gene. Similar molecular genetics techniques have been used to study three families with choroideremia, and the gene has been located between two markers on the X-chromosome. Identification of the bracketing markers makes it likely that this knowledge soon may be useful for diagnosis of choroideremia, and increases the probability that the gene will be isolated.

The sequences of the genes which normally code for the visual pigments were recently determined. These pigments, which make possible our low-light and color vision, are the first components of the "phototransduction cascade", the molecular events by which the effects of light on the retina are converted to the electrical signals which convey information to the brain. The molecular basis of "color blindness" is becoming understood, as the genes encoding the red and green pigments of several color deficient males have been analyzed and found to differ from normal genes. The genes for other proteins involved in the cascade also are under intense study, and the visual system is likely to be the first sensory system in which the basic processes will be understood at the molecular level.

OXIDATION HYPOTHESIS AND CATARACT

Question: Dr. Kupfer, in your statement you talk about the oxidation hypothesis and cataract. Would you please tell us a little more about this theory?

Answer: The oxidation hypothesis is that light, either from the sun or artificial light, enters the human eye and the lens and then causes a series of chemical reactions transforming normal oxygen into more active types of molecules such as singlet oxygen, hydroxyl radical, and hydrogen peroxide. According to the hypothesis, these oxygen-containing molecules damage the lens and cause cataract. If the oxidation hypothesis is correct, it would be possible to develop methods of preventing cataract by learning how to block the formation or activity of the oxygen-containing molecules that cause damage to the lens.

VISION RESEARCH FACILITIES

Question: Doctor, I see that your Vision Research Facilities program is only $2.2 million in 1987 and that no money is being requested for the program in 1988. Is there no longer a need for this money?

Answer: There is clearly still a need for construction and renovation of research facilities, but the research grants program must be accorded first priority.

Question: Have you funded all of the requests?

Answer: No, we have not funded all of the requests.

CLINICAL TRIALS

Question: Doctor, I understand that the NEI is supporting 16 clinical trials to evaluate new treatments for eye diseases. For example, there is a study to see if early treatment of diabetic retinopathy with lasers is effective. Are there any other clinical trials that you would like to pursue?

Answer: Yes, there are eight clinical trials that we are prepared to initiate as funds are made available. They include: a study to evaluate new techniques for assessing the visual potential of babies who have various stages of retinopathy of prematurity; a trial to evaluate surgical versus laser treatment for advanced glaucoma; a trial of antiviral drug treatment for CMV retinitis; an assessment of acyclovir and other antiviral agents in the treatment of ocular herpes infections; a study to determine the effects of the latest contact lenses on the cornea, at the cellular level; an assessment of anticlotting agents in the treatment of retinal vascular occlusions; a trial to assess laser treatment of macular edema in central vein occlusion; and a study comparing early versus late intraocular surgery for accident victims who have suffered ocular trauma.

Question: Is there money in the budget to start them?

Answer: The 1987 budget includes funds for the first two trials that I mentioned. No additional trials will be started under the 1988 request.

CORE GRANTS

Question: Dr. Kupfer, your institute has a core grant program that provides shared resources for groups of NEI grantees at eye research centers. I understand that these grants have been limited to $150,000 per year for almost ten years. Has that cap seriously affected your ability to keep pace with inflation?

Answer: In 1980, on the advice of the National Advisory Eye Council, the guidelines for the NEI core grant program were revised to limit direct costs for these awards to an average of $150,000 per year. This action was taken because the institute and Council were concerned with the growth of this program at a time when the overall NEI budget was levelling off and the funds for competing grants reduced. At the same time it was decided that the core grant program should be no more than 5 percent of the extramural budget.

Currently, approximately 3.5 percent of the extramural budget has been allocated for core awards. As funds become available the NEI plans to increase this cap, because these institutions cannot buy the same things that they were able to purchase ten years ago. The types of shared resources that this program provides are much more expensive today than they were then, for several reasons: there has been a tremendous change in technology; our sensitivity to more humane treatment of animal models has led to greater expense for facilities that utilize them; and salary levels have risen to keep pace with technology. Using the Biomedical Research and Development Price Index (BRDPI) which is calculated by the Bureau of Economic Analysis of the Department of Commerce, the purchasing power of a $150,000 grant in 1988 would be equivalent to $87,000 in 1978 dollars.

Question: Is this a problem?

Answer: We have maintained the viability of the program, thus far.

Question: Are there other eligible institutions that you would like to support?

Answer: The NEI has made a conscious effort to support as many institutions as possible. There are certain eligibility requirements that institutions must meet in order to receive core grant awards. Since there are currently 50 institutions that meet these requirements, I would say that the size of the program has determined the number of core grant awards that we can make. The preferred number of awards at this time is 35.

BIOTECHNOLOGY

Question. Dr. Kirschstein, I know you have led the effort at NIH on Biotechnology. Is this another area of basic research where we will spend millions of dollars to unlock the basic scientific secrets only to let foreign interests take the results from the laboratories through development to the commercial product stage?

Answer. Biotechnology, as defined by the Office of Technology Assessment, "includes any technique that uses living organisms (or parts of organisms) to make or modify products, to improve plants or animals, or to develop microorganisms for specific uses." While mankind has been utilizing biological processes in agriculture, in the brewing of beer and wine, in baking, and in other areas throughout history, the newest aspect of biotechnology, namely recombinant DNA technology or "genetic engineering," has been developed by scientists whose basic research efforts originally were supported by NIH and in particular the National Institute of General Medical Sciences. Today, these new biotechnological advances are finding virtually unlimited applications in fields as diverse as medicine, agriculture, mining, and solid waste management. This has spawned a large and still growing biotechnology industry which, it has been estimated, may encompass a $23 billion market in medicine alone by the year 2000, with world-wide sales in agriculture growing to as much as $100 billion by the end of the century.

The primary interest of the NIH in all this is, of course, the enormous benefit to be derived from biotechnology in terms of the development of new and better methods for the diagnosis, treatment, and prevention of the many diseases which still plague mankind. The recent study about AIDS done by the Institute of Medicine, for example, noted that the availability of recombinant DNA techniques was responsible for the "unusual speed with which the etiologic (causative) agent of AIDS was isolated...(and) characterized." We are aware of the concern of the Congress, however, that industrial firms in foreign countries, aided by their governments, may reap the benefits of the investment of the United States in basic research in this area, as they have in the semiconductor field. Based on my current knowledge of the state-of-the-art in biotechnology, I would agree with a statement recently made by the president of one of America's large and successful biotechnology firms. Mr. Ronald Cape, President of the Cetus Corporation, believes that worries of this nature are really premature with regard to the biotechnology industry, because it is still years from maturity. Mr. Cape and I agree that the future of biotechnology is still very much dependent upon the results of basic research studies of the kind supported by the NIH, and that support for such research should continue to have a high priority.

As Chairman of the NIH Committee on Biotechnology Activities, I stay abreast of developments in biotechnology and plan to keep the Committee informed if problems arise regarding industrial competitiveness with foreign firms.

Question. What is needed to move the research results from the laboratories to application by U. S. firms in the world marketplace?

Answer. I believe there are a number of needs, all of which relate to the process of "scaling up" for efficient large scale production of substances that, up to now, have been made only in the laboratory. These include: (1) the need to continue expanding the knowledge base available to firms in the U. S., through the support of basic and applied research studies; (2) the need to assure that the United States has an adequate national supply of highly trained, competent scientific personnel, most particularly in the areas of recombinant DNA, molecular genetics, and bioprocess engineering--

which were identified as shortage categories in a 1985 report issued by the National Academy of Sciences, summarizing the results of a survey of 138 biotechnology firms; (3) the need for large amounts of venture capital, which is especially important since the scaling up process is very capital intensive; and (4) the need for a continuation of the close relationships which have grown up in this country between academic researchers and biotechnology firms. Additionally, I think that we should do what we can to make sure our academic researchers have access to modern, state-of-the-art instrumentation.

I would note that, over the past two years, the NIGMS has joined with the National Cancer Institute to provide $250,000 to the National Science Foundation for the partial support of an NSF-sponsored Biotechnology Process Engineering Center located at the Massachusetts Institute of Technology in Cambridge. The NIH is supporting this center to cooperate with the NSF in an effort to address the critical need for an increased number of bioprocess engineering students who have cross-disciplinary training in the life sciences. This is an example of the kind of activity through which the Federal Government can help to move research results from the laboratory to commercialization.

THE SPECIAL ROLE OF THE NIGMS

Question. The NIGMS conducts basic and fundamental research into the cellular and molecular basis of disease, the genetic basis of disease, pharmacological sciences, instrumentation and methodology development and other subjects. Is there a reason why these subjects couldn't be pursued in the other institutes that are relatively more focused on specific diseases and disease categories?

Answer. A great many research projects are designed to address important or interesting scientific questions concerning the physical structures and functions of biological entities such as proteins. At the start of such a project the investigator does not really know where the research will eventually lead in terms of its focus on a particular disease or disorder. Projects of this nature, to the extent that they are considered scientifically meritorious, are assigned to the NIGMS for funding support, because they meet the Institute's legislatively mandated mission of supporting research projects in the general or basic medical sciences "which have significance for two or more other institutes, or are outside the general area of responsibility of any other institute." Thus, if a researcher wanted to study a particular protein associated with normal bodily functioning or not yet associated with a particular disease, in order to learn more about it, and his research proposal was favorably reviewed, the NIGMS would be called upon to supply funding support. If his or her research eventually led to the discovery that the protein under study was, in fact, associated with, for example, cystic fibrosis, diabetes, cancer, or some other disorder, it would subsequently be assigned for support to the appropriate categorical institute.

An excellent illustration of the role that the NIGMS plays in the division of labor established at NIH is provided by the work of Drs. Michael Brown and Joseph Goldstein, co-winners of the 1985 Nobel Prize for Physiology or Medicine. These individuals were initially supported by the NIGMS, when the focus of their studies was

on the nature and function of cellular steroid receptors. Gradually, however, their work began to focus on a particular steroid chemical, cholesterol, and they soon discovered the mechanism that controls its metabolism. Since they were then producing information vital to an understanding of the role of cholestrol in atherosclerosis and other cardiovascular diseases, their research was picked up for support by the National Heart, Lung, and Blood Institute, under whose aegis they further developed their work to the point where, in the words of the Nobel committee, it "drastically widened our understanding of cholesterol metabolism and increased our possibilities to prevent and treat...atherosclerosis and heart attacks".

AIDS RELATED RESEARCH

Question. Dr. Kirschstein, we are all concerned about AIDS and want to make sure that research on AIDS is adequately funded. But, what about the basic research that your Institute supports and how it fits into this effort? The recent Institute of Medicine report, "Confronting AIDS", makes much of the role that basic research has played in this area, noting that "The progress achieved to date in identifying and characterizing the causative agent for AIDS would not have been possible without the scientific and medical knowledge achieved over the years through the pursuit of basic biomedical research".

How has NIGMS been involved in AIDS-related research to date? And, what contributions can your grantees be expected to make in this area in the future?

Answer. The NIGMS has not, up to now, been directly involved in supporting AIDS-related research. But, as the quotation from the IOM report correctly asserts, basic research of the kind supported by the NIGMS was responsible for the development of many of the approaches and techniques, such as recombinant DNA technology and molecular cloning, that made it possible to quickly identify the human immunodeficiency virus, known as HIV, as the agent responsible for causing AIDS.

Utilizing $5 million in FY 1987 funds being provided by the Office of the Director, NIH, the NIGMS is currently assisting in the next step in the battle against this disease; i.e., developing information which can be used in the rational design of drugs and vaccines capable of interfering with the action of the AIDS virus. This effort is focused on attempts to learn more about the structure of the proteins involved in the development of the disease, AIDS. These are the proteins which coat HIV, the proteins on the host cell which make up the receptors that allow the virus to "dock" with the host, and the proteins inside the host cell that transform the virus into its final, deadly form. Research in this area is based on the premise that, since the structure of a protein dictates its functions, the best way to short-circuit the activity of the AIDS virus is through the two-step process of first obtaining a detailed knowledge of the structures of the proteins involved, and then developing drugs designed to take advantage of that knowledge--drugs that could block receptor sites, for example. This is the approach recommended in the IOM report.

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ADEQUACY OF RESEARCH TRAINING SUPPORT

Question. In 1985, the National Academy of Sciences issued a report entitled, "Personnel Needs and Training for Biomedical and Behavioral Research," which contains the following statement:

> "During the 1970's, training funds declined sharply relative to research funds and currently amount to less than 6 percent of research expenditures of the administering agencies (including NIH) .. down from 17 percent in 1971. It is the committee's view that training funds should not be further reduced. The nation must begin to plan for the 1990 decade when many current faculty members will reach retirement age and college enrollments will once again start to increase."

The NIGMS is the primary source of research training funds at NIH, Doctor. So let me ask you, are we supporting enough research trainees for the future? And, what are the consequences if we aren't?

Answer. I believe the assessment made by the Academy is correct. There have been dramatic reductions in the support provided for research training activities over the past decade. While the support currently being provided is adequate to satisfy short term needs, the Academy properly pointed out the importance of anticipating the need for well trained individuals to take the place of those likely to retire in the next ten years. In addition, there is likely to be a demand for such researchers in the growing American biotechnology industry.

ABZYMES

Question. Dr. Kirschstein, the "Science Times" supplement to The New York Times on January 27, 1987, reported the development of an important new research tool, referred to as an "abzyme," which was developed with support from the NIGMS. The article in the Times indicated that abzymes could open up exciting new basic research opportunities and, in additon, be used for such purposes as dissolving blood clots or attacking cancer cells. Doctor, what are abzymes? And how important do you believe they are, or could be?

Answer. Abzymes are proteins that combine the properties of two types of chemicals that occur naturally in the body. Antibodies and enzymes are both proteins, but they normally have quite different characteristics. Antibodies possess extremely specific binding properties, and so can be "targeted" just about anywhere in the body. Enzymes have catalytic properties, and make it possible for a host of important biochemical processes to be "speeded up" so they can occur in the body at normal body temperatures. They are also able to "cut" proteins into small pieces. Thus, abzymes are catalytic antibodies, or antibodies that possess the properties of enzymes.

In December, a team of investigators at the Scripps Clinic in California, working with support from the NIGMS, discovered these substances which they dubbed "abzymes." Their success raises a host of research and clinical possibilities. It may eventually be possible, for example, to create a wide range of abzymes capable of stimulating reactions for which no naturally occurring enzymes exist.

One of the most important goals here would be to devise catalysts which can cut proteins at specific sites. If this were possible, industrial chemists could use this new approach to successfully manufacture entirely new kinds of materials, or make old materials more efficiently--important considerations for the Nation's $175 billion per year chemical processing industry. But, from the point of view of the mission of the NIH, the potential value of abzymes is twofold: (1) they could be used to cut pieces out of proteins at selective sites, thereby providing a new method to elucidate the role of the structure of a protein as it relates to its function, currently an important area of research study, and (2) it may be possible to develop abzymes capable of binding directly to diseased cells or tissues, such as cancer tumors, and then catalyze chemical reactions which can effectively eliminate the diseased tissue.

It should be noted that a biotechnology firm in Rockville, Maryland, working closely with the Institute's grantees, is already beginning to use abzymes as an aid in the diagnosis and treatment of various viral diseases and cancers, while also looking at the possible use of abzymes to dissolve blood clots.

REDUCTION IN RESEARCH PROJECT GRANTS

Question. The President's budget requests funds for NIGMS to support 855 new and competing research project grants in 1988, more than the 744 currently projected for 1987, but considerably fewer than the 981 awards funded in 1986. What is the impact of this reduction in terms of fully exploiting available research opportunities in such areas as genetics research?

Answer. The NIGMS will be able to support a considerable amount of truly excellent research with the funds provided for research project grants in the President's 1988 budget. In fact, NIGMS estimates that the total number of research project grants to be awarded in FY 1988 would be about the same as in both 1986 and 1987. Nevertheless, the Institute will, as stated, be supporting 126 fewer new projects in 1988 than it did in 1986; and this will clearly reduce our ability to fully exploit existing research opportunities in genetics and other areas. Such opportunities include work involved in locating new genetic "markers" for hereditary diseases similar to the markers previously identified for Huntington's Disease and cystic fibrosis.

Question. Is NIGMS receiving a smaller share of NIH's research project grant money than it did in the past?

Answer. The NIGMS has traditionally been allocated approximately 15 percent of NIH's new and competing research project grants. In both 1985 and 1986, NIGMS awarded 15.8 percent of the new and competing grants funded by NIH. This dropped to about 13 percent in 1987, but would increase again to about 15 percent under the President's 1988 budget request. In terms of funds provided for the support of such grants, the NIGMS has dropped from about 14 percent of the NIH total in 1986 to 11.7 percent in 1987. Under the President's budget, this would increase to 13.7 percent in 1988.

HIGH QUALITY OF NIGMS SUPPORTED RESEARCH

Question. Dr. Kirschstein, the Blue Sheet, a health research publication, recently reported the results of a study performed for the NIDDK Council, which showed that the NIGMS was the NIH component most frequently cited as the source of funds for research articles published in nine leading medical research journals. The authors of the report noted that "extramural researchers either wholly or partially supported by NIGMS were listed as contributors to 1,433, or 31%, of the 4,671 papers published during the study period." Moreover, even when relative budget size was taken into account, the NIGMS continued to rank first.

Doctor, what does this tell us about the activity in the fields which you support, such as genetics, cellular biology and biophysics? And, what about the quality of the applications which the NIGMS is receiving? Is it unusually good?

Answer. The statistics contained in the NIH report which you mention are indicative of the many exciting research opportunities that have been exploited in past years and that currently exist in the basic reserach areas supported by the NIGMS. Biomedical research is still riding the crest of the wave created by the development of recombinant DNA technology by Institute grantees, in that this technology is now being applied to areas outside of genetics, such as pharmacology, with great success. We are also benefiting from dramatic improvements in laboratory research instrumentation, such as nuclear magnetic resonance spectroscopy, much of which was developed by NIGMS' grantees and is providing scientists with important new information about the microscopic machinery of the human body.

The quality of the research project grant applications that the NIGMS has been receiving has also been uniformly high. This is illustrated both by the Institute's payline, which is normally among the lowest at NIH, as well as the many prestigious awards received by NIGMS grantees. Recently, for example, Dr. Alfred Gilman, a grantee at the University of Texas Health Science Center in Dallas, received the Richard Lounsbery Award, which is presented jointly by the American and French Academies of Sciences and includes $50,000 in prize money. Dr. Gilman received this award for his pioneering research on the role of G-proteins, substances which are now recognized to play a vital role in many normal biological processes, as well as in the action of therapeutic drugs.

RESEARCH ON GENETIC DISEASES

Question. Dr. Kirschstein, the Committee understands that the more than 3,000 genetic diseases which afflict mankind are believed to account for some 15 to 20 percent of the nation's health care costs, as well as incalculable personal suffering--important reasons for supporting basic research in this area aimed at the development of improved methods of diagnosis, treatment, and prevention.

The Genetics Program of your Institute is the single largest source of Federal support for such basic research. Can you give us your perspective with regard to what progress is being made in the fight against genetic diseases?

Answer. During the past few decades, a number of achievements in human genetics have led to increased survival rates and an increased quality of life for victims of genetic diseases. For example, prevention of hemolytic disease due to Rh factor incompatibility is now possible in newborns. The diets of infants suffering from phenylketonuria (PKU) can be modified and factor VIII administered to young hemophiliacs thanks to genetic screening for victims of genetic diseases. The roots of these achievements are readily traced back to fundamental research in areas such as immunology, enzymology, metabolic studies, and cell biology. Later would come the clinical realization--often due to effective interaction between fundamental and clinical researchers--that such research could have a strong bearing on human disease.

This mutual interaction and interdependence between fundamental and clinical researchers is continuing. New techniques for mapping human genes, or the production, in microorganisms, of previously scarce therapeutic agents, can be traced back to research that was thought by some to be rather arcane at the time it was originally undertaken. Unexpectedly, research on why some bacterial viruses killed their hosts, while the DNA of other viruses was either incorporated into bacterial chromosomes or broken down by unusual bacterial enzymes, has led to many of the tools of modern human genetics. Further progress in human genetics will continue to rely on a substratum of basic biomedical research to provide the methods and concepts which will fuel future advances. We also feel that future research advances in medical genetics will not only have a bearing on diseases which are clearly hereditary, but also on common diseases such as diabetes, atherosclerosis and cancer, in which both hereditary and environmental factors are involved.

In addition to its support of fundamental biomedical research, the NIGMS also seeks, through its Medical Scientist Training Program, to assure the maintenance of an effective linkage between advances in basic research and their application to clinical problems.

Question. What benefits can we expect to derive from the recent identification by scientists of the genes responsible for such diseases as cystic fibrosis?

Answer. We feel that there are great benefits to be gained from recent successes in the chromosome mapping of a number of the genes involved in the occurrence of genetic diseases, because this information will help us to eventually identify the basic defects responsible for these diseases, including cystic fibrosis, Huntington's disease, and muscular dystrophy. Correcting such defects is, of course, our ultimate goal; but this can only be done after we find them. Localizing the site of a defective gene to a small region of a chromosome allows scientists to "walk" toward the gene, isolate it, determine its DNA sequence, and then identify its defective or missing product. Although such work is extremely difficult, progress is being made in a number of genetic conditions, and this will accelerate with improvements in methodology. Once the nature of a defective gene and of its gene products are better understood, rational or preventive regimens can be designed and tested. The successes that human genetics research have already achieved with Rh disease, PKU, and hemophilia provide us with confidence for continued progress.

One very recent achievement--the identification by an NIGMS grantee of a marker associated with a gene implicated in manic-depression--shows that this type of research can lead to unexpected spinoffs. For the first time, a mental illness has been shown to have a genetic cause, and is thus the result of an organic malfunction. Such findings may help to remove the stigma commonly associated with psychiatric disease and offer the hope that the biological causes of serious psychiatric illness can be understood, and ultimately, ameliorated or reversed.

DRUG DELIVERY SYSTEMS

Question. Under the heading of "Drug Delivery Systems," the budget justification material for the NIGMS Pharmacological Sciences Program states that "...a drug's therapeutic index--the ratio of its effective dose to its toxic dose--can be dramatically improved by administering the drug after encapsulation in appropriately designed liposomes."

Could you explain this further and give us a few examples of the kinds of research projects being supported in this area? Have we found a way to make drugs safer?

Answer. Many diseases occur only in certain organs or tissues of the body, leaving the rest of the body unaffected. Most drugs, however, by virtue of circulating in the bloodstream throughout the body, have effects on all organs and tissues. In many cases, what is a toxic side effect of a drug is nothing more than the drug exerting its expected action on normal tissues. Thus, one goal of targeted drug delivery systems is to eliminate or minimize the exposure of the non-diseased parts of the body to a particular drug, and at the same time, increase the amount of effective drug that actually reaches the desired site of action. Liposomes represent one such drug delivery system. Liposomes are nothing more than microscopic, membrane encapsulated spheres which can be filled with drugs. What makes liposomes promising is that they are man-made, and thus clinical researchers can decide how they should act and design them accordingly. For example, liposomes can be made that disintegrate at elevated temperatures, so that if it were possible to raise the temperature of the portion of the body, such as a tumor, upon which the drug should act, then the liposome would retain the drug until it reached the heated portion of the body. Thereupon the liposome would disintegrate, releasing all the needed dose of drug at the site of action. Another possibility would be to design the liposome so that it would be recognized by a receptor on the target cell and would be taken up inside that specific type of cell, after which it would release its contents.

Dr. Francis Szoka, an NIGMS grantee of the University of California, San Francisco, has been attempting to define the appropriate composition of a liposome to target it selectively to liver cells. He has also been studying how liposomes are broken down once they get inside cells, with the goal of designing them in such a way that they would be either resistant to, or extremely sensitive to, a particular environment inside certain kinds of cells.

Dr. Milton Yatvin, a grantee at the University of Wisconsin, is also engineering liposomes that are broken down under acidic conditions. Since tumor metastases often survive in an acidic environ-

ment, Dr. Yatvin is attempting to design a liposome system that will deliver chemotherapeutic agents to the tumor only under acidic conditions.

Another researcher at the University of California, San Francisco, Dr. Anthony Hunt, has developed and patented the use of liposomes as a functional oxygen transport system. This involved designing liposomes that would carry hemoglobin, the oxygen-carrying component of mammalian blood. These liposomes were designed to be stable, sterile, and similar enough to normal red blood cells that they would not be removed too rapidly by the body's scavenging cells.

Work on liposomes and other drug delivery systems is still in its early stages, and with the exception of Dr. Hunt's work on an artificial red blood cell, has not reached the level of clinical utility. This is not surprising when one realizes that in order to have a liposome work optimally, it must circumvent a variety of the body's natural defense systems.

STRUCTURAL BIOLOGY RESEARCH

Question. Dr. Kirschstein, your justification material makes note of two recent reports issued by the National Academy of Sciences (one dealing with AIDS) both of which mention dramatic advances being made in the field of structural biology, as well as the vital importance of continued research in this area.

What is structural biology? How does it relate to AIDS? And, to what extent is your Institute involved in supporting research in this area?

Answer. The field of structural biology is generally considered to include those areas of research which examine the structures of biologically important molecules, particularly large biomolecules such as proteins and nucleic acids. These studies usually involve the applications of sophisticated techniques derived from the science of physics, such as X-ray crystallography and nuclear magnetic resonance (NMR) spectroscopy. Such technology requires the use of state-of-the-art instrumentation.

One possible way in which structural biology may contribute to the fight against AIDS is by helping in the design of antiviral drugs. This involves an understanding of the three-dimensional structure of AIDS-related proteins and nucleic acids, and of the virus itself, so that models can be built of specific regions on these molecules which may be accessible to the binding of drugs. Drugs could then be synthesized so that a unique "lock and key" arrangement would exist, and might therefore allow the bound drug to neutralize a virulent component of the viral system.

The NIGMS provides on the the order of $80 million per year for the support of research in structural biology, primarily through the research project grant mechanism. We are also organizing and managing the NIH Director's initiative on the application of structural biology to targeted drug design to combat AIDS. This will amount to about $5 million in the current fiscal year.

RESEARCH RESOURCES

Question. This activity provides the needed resources to investigators at biomedical research institutions throughout the country. Does the availability of adequate research resources get considered by the various Institutes before making the awards?

Answer. Yes it does. Investigators applying for research project grants to the various NIH institutes include in their applications information regarding how and where they are going to conduct the research proposed in their application. As the application goes through peer review and NIH staff review, the fact that the investigator proposes to use the facilities of a resource center is noted on the summary statement. Reviewers are generally aware of the excellent facilities provided by resource centers and consider that fact in arriving at their evaluations. Institute staff are also aware of the advantages of having their grantees use research resources centers -- in view of the obviously lower cost associated with using a dedicated, shared resource facility versus providing separate laboratories, equipment, and other facilities to each individual investigator.

Biennially the Division of Research Resources publishes a series of resource directories that give locations of our resource centers and information on kinds of research for which they are capable of providing support. These directories are distributed to most institutions that conduct biomedical research, thus making institutional scientists aware of the availability of these research resources.

Question. Under what conditions are additional awards made to researchers and institutions for "research resources" over and above those funded through institute awards?

Answer. The Division of Research Resources is the focal point and primary component within the NIH charged with the responsibility for identifying and making available the needed research resources to investigators at biomedical research institutions throughout the country. Whereas the research institutes at the NIH have as their mission to conduct research related to their particular disease area, the mission of DRR is to provide research facilities, clinical research environments, sophisticated instrumentation, and well-equipped laboratories for use by NIH-supported investigators. These resources are located throughout the country and are supported by DRR through a separate appropriation for research resources. These research resources awards receive a very thorough and critical review to ensure that the proposed resources are necessary, feasible, and possess a strong potential for advancing biomedical research. The Division also looks favorably at the cost effectiveness of providing general institutional resources which can be shared by many NIH-supported investigators throughout the Institution, the region, or the country.

ELIMINATION OF BRS FORMULA GRANTS

Question. $263,324,000 is requested for the Research Resources account which will support 191 research centers. Funding

for most projects continues at last year's level with the exception of the Biomedical Research Support Formula Grants Program which has been proposed for elimination in 1988. Why is the formula grant being proposed for elimination?

Answer. The Biomedical Research Support Grant (BRSG) activity will be eliminated in 1988. This reduction has been proposed by the administration in order to permit NIH to continue to support 19,000 investigator-initiated research project grants, thus maintaining a balanced program and, at the same time, responding to the public demand for deficit control. Maintenance of a stabilized base will ensure that researchers with meritorious new ideas will have an opportunity for successfully competing for funds. In view of the growing concern for budget control, the BRSG Program, which provides generalized institutional support, must rank as a lower priority when compared to other NIH programs which permit the focusing of research funds to specific priority areas.

GCRCs AND RESEARCH ON CHILDREN

Question. Do your General Clinical Research Centers conduct any research on children or deal with children at all? If so, what important findings have been made that lead to prevention of damage resulting from metabolic problems of genetic origin?

Answer. Yes, eight Centers deal exclusively with children and one deals only with premature infants. In addition, several others include pediatric patients.

Biotinidase deficiency is an inborn error of metabolism that has recently been described and one for which an effective therapy has been defined. Infants with this disorder suffer from an inborn deficiency of an enzyme (biotinidase) that keeps the body from recycling and reusing a vitamin called biotin. The condition presents a serious threat to newborn babies. The condition was initially identified by clinical researchers at the GCRC at the Medical College of Virginia. An infant with the disorder, if not properly treated, can be subject to problems ranging from subtle neurological abnormalities to mental retardation, coma, and death.

The treatment for a patient who has been diagnosed with this condition is easy and inexpensive, involving little more than dietary supplements of biotin, added to the infant's food or formula. The cost is less than $100 per year. This vitamin is also found in liver, kidney, cooked eggs, and most vegetables. Newborn screening for this disorder ought to be added to the testing for other metabolic defects that is now routine because babies with this problem do not show any signs or symptoms until several weeks to months after birth.

CARE OF LABORATORY ANIMALS

Question. We have heard a great deal about the need for the appropriate care of animals used in biomedical research. How has your Laboratory Animal Sciences and Primate Research Program attempted to deal with this issue?

Answer. The DRR Laboratory Animal Sciences Program approaches the problem in several ways:

(1) Through the publication of the Guide for the Care and Use of Laboratory Animals, now in its 5th edition, institutions are assisted in caring for and using laboratory animals in ways that are judged to be both professionally and humanly appropriate. The Guide contains a series of guidelines/recommendations to the scientific community for the proper care, housing, and monitoring of animals used in research, including such matters as veterinary care, sanitation, environmental control, food and bedding, procurement, quarantine, surgery, etc., as well as guidance concerning the physical condition and design of animal facilities, personal hygiene of animal care staff, and occupational health programs for them. This publication has been supported by contract with the Institute of Laboratory Animal Resources of the National Research Council. Approximately 35,000 copies of the Guide have been distributed to principal investigators and to institutions conducting biomedical research.

(2) A set of instructional aids on laboratory animal techniques has been prepared for dissemination to institutional investigators. These aids deal with laboratory handling of 16 animal species and consist of audiovisual materials including video tapes and slide tape cassettes on a variety of procedures including aseptic surgery, anesthesia, analgesia, and postoperative care. The species included are rats, hamsters, guinea pigs, rabbits, goats, sheep, and swine, as well as gerbils and chinchillas. This set of instructional aids has been developed under a research grant to the University of California at Davis.

(3) For the 13,000 nonhuman primates housed in the seven Primate Research Centers, an ambitious five-year renovation/improvement program launched in 1984 is well under way. The purposes are to upgrade the Centers' physical plants and to provide the best in housing, caging, and sanitation for these valuable animals, and in the process to assure that the humans who work with and care for the animals are protected from any potentially biohazardous situations. Centers have been assisted thereby in reaching the accreditation standards of the American Association for Accreditation of Laboratory Animal Care (AAALAC).

(4) Through the strengthened Animal Facilities Improvement Program, the Division has so far been able to make 41 awards for up to $500,000 each for equipment, alterations, and renovations necessary to meet the standards/guidelines of the aforementioned Guide for the Care and Use of Laboratory Animals. The matching requirements of the Improvement Program assure financial involvement at the local, institutional level. In the current fiscal year some 35-40 additional improvement awards are anticipated.

RESEARCH IN HUMAN GENETICS

Question. We have heard a great deal about the new research being conducted in human genetics. How are your resource programs used in carrying out this research? What advances have been made using research resources in this area?

Answer. Many of our resource programs are contributing to research in chromosome mapping and DNA sequencing in humans and other model systems. For instance, within the Biomedical Research Technology Program (BRTP) a cooperative agreement with IntelliGenetics, Inc. provides computer software, hardware, database and consultation services and includes nine programs for representing and manipulating nucleic acid and protein sequence data.

Support through the Animal Resources Program (ARP) for the Repository of Human DNA Probes and Libraries provides scientists with access to tools being used to map the human genome and develop diagnostic tools for human genetic diseases or diseases with genetic components.

Instruments purchased through the Biomedical Research Support Shared Instrumentation Grant (BRS-SIG) Program including computers, cell sorters, and sequencing facilities are also being used by investigators for gene mapping and sequencing projects.

The General Clinical Research Centers provide unique settings in which investigators can bring together patient populations, highly skilled diagnosticians, and controlled research protocols to study both single gene and multifactorial disorders.

Furthermore, the BRTP-supported resource at Los Alamos has been instrumental in producing one set of the chromosome-specific libraries which have been incorporated into the Repository, as well as providing chromosome libraries from a particular cell strain for individual investigators. Probes and libraries from the Repository are being used is projects as diverse as developing a flanking marker genetic linkage test for the presymptomatic diagnosis of cystic fibrosis, searching for the chromosomal location of a deletion associated with small cell lung carcinoma, and mapping the gene for nevoid basal cell carcinoma.

MINORITY PROGRAMS

Question. Your Division provides support for minorities in science through a number of its programs. It provides support to colleges, universities, faculty members, undergraduate students, graduate students, and high school students. What successes have these programs had over the past 15 years?

Answer. DRR does administer a number of minority programs including:

- The Minority Biomedical Research Support (MBRS) Program, initiated in 1972, provides expanded opportunities for careers in biomedical research for ethnic minorities by improving the research capabilities of institutions where sizeable minority enrollments and commitment to the training of minorities exists.

- The Minority High School Student Research Apprentice (MHSSRA) Program, initiated in 1980, provides minority high school students with a meaningful experience in various aspects of health-related research designed to stimulate the student's interest in pursuing a career in biomedical research.

- The Research Centers at Minority Institutions (RCMI) Program, initiated in 1985, is funded through an appropriation to the Office of the Director, NIH. Its purpose is to expand the national capability for research in the health sciences by assisting, through grant support, predominantly minority institutions that offer the doctorate in either the health professions or health related sciences.

Minority Program successes include:

MBRS Program

- More minority students participating in the program, are pursuing advanced degrees. Of the MBRS students who receive B.S. degrees 29.5% go to graduate school; and 52.1% go to medical, dental, or other health-related schools.
- Faculty supported by MBRS are becoming more successful at getting their research grants funded. In 1986, faculty at Ph.D./M.D. granting institutions were successful in getting 32% of their approved applications funded. This is up from approximately 20% in earlier years and is comparable to the success rate of investigators at majority institutions. In 1986 faculty supported by MBRS had an overall success rate of 38% of approved applications funded, as compared to 15%-20% in earlier years.
- MBRS researchers are currently publishing significantly more papers in refereed journals than in earlier years.
- In preliminary analyses of the National Academy of Science (NAS), the American Dental Association (ADA), and the American Association of Medical Colleges (AAMC) data bases, it has been possible to identify:
  - 256 former MBRS students who have received a Ph.D.
  - 95 former MBRS students who have been awarded D.D.S.
  - 807 former MBRS students who have received the M.D.

MHSSRA Program

- 96% of all students participating in the Program plan to attend college.
- 71% of all students selected a career in biological and health professional sciences as a future career choice.
- 36% gave a talk at a seminar or symposium.
- 18% worked with supervisor on publication.
- 17% received an award, scholarship, or science medal.

RCMI Program

- Awards have been used to enhance the research infrastructure through successful faculty recruitment and development, extensive laboratory renovation and expansion, and the purchase of advanced scientific equipment.
- Expanded research efforts at the recipient institutions are in the neurosciences, immunogenetics, molecular genetics, and chronopharmacology.

NEUROTRANSMITTER RESEARCH

Question. Dr. Pickett, we have heard from many in the scientific community about the importance of the development of

technology that assesses or measures neurotransmitter activity. What types of activity is DRR participating in that is related to this area -- what scientific advances could be hoped for resulting from this important technology?

Answer. The DRR's Biomedical Research Technology Program (BRTP) is supporting a number of projects in the areas of research relevant to neurotransmitter research.

The provision of computer support in a number of neurotransmitter research efforts has been accomplished by this Program. An example of one such project is the computer support provided for a study of the molecular analysis of neurotransmitter genes through BIONET. This is a resource for molecular biology that provides computational assistance in data analysis and problem solving to scientists engaged in structural studies of nucleic acids and proteins. In this study of neurotransmitter genes, the molecular basis for neurotransmitter control will be elucidated. Other related computer support activities include neuropeptide modelling studies, studies of acetylcholine release from neuromuscular junctions and studies of drug modulation of central receptors for neurotransmitters. These are basic research studies designed to further understanding of the mechanisms used for regulation of neurotransmitter structure and function.

In a more applied area of neurotransmitter research, a BRTP small business innovation research grant is providing a new dimension in neurochemical analysis. A new instrument, the ESA Neurochemical Analyzer, is in the final stages of preparation for commercial availability. This state-of-the-art equipment can analyze several hundred compounds relative to neurotransmitters, their precursors, and metabolites. This includes a variety of drugs and virtually every electroactive component of the tyrosine and tryptophan metabolic pathways. The analyzer can detect all of these compounds in a simple sample run; it operates in the femtogram to picogram range for all compounds detected. Most importantly, this device will facilitate diagnosis of specific disease states and gauge biochemical effects of pharmacological interventions. This is an example of the transfer of a new technology in neurotransmitter research from the laboratory to the commercial market, for use in both diagnostic and research applications.

PROACTIVE OR REACTIVE RESEARCH

Question. Institute studies in the past have found commercially important chemicals used as deodorizers and water repellents to have cancer-causing properties when used in experiments with rats. Is there an ongoing comprehensive review and research effort conducted by the Institute to insure that commonly used commercial products do not contain chemicals which would be hazardous to human health?

Answer. Comprehensive reviews of hazardous chemicals in commercially available products are conducted by regulatory agencies such as the Consumer Product Safety Commission, Food and Drug

Administration and Environmental Protection Agency. Based upon these reviews and any potential hazards to public health, chemicals are nominated by the agencies for testing to the National Toxicology Program for specific or comprehensive toxicologic evaluation. Like the public or other governmental agencies, the NIEHS has nominated chemicals for study. Several chemicals, for example, isoprene, and chloroprene, important analogs of 1,3-butadiene, used for making synthetic rubber, were nominated by NIEHS and are now being studied in laboratory animals. The Institute makes known all their basic and applied research findings, and in particular holds open public peer review meetings to evaluate our short-term and long-term toxicology and carcinogenicity study results obtained from both in vitro and in vivo experiments. NIEHS/NTP expressly informs regulatory agencies about chemicals that have been found to be particularly toxic or carcinogenic. This information is utilized by the regulatory agencies to make the appropriate benefit-risk judgments to protect public health.

Question. Are there enough safeguards to insure pre-market testing prior to the commercialization of a product?

Answer. In general, the pre-marketing safeguards are adequate. Both the legislative basis in the food and drug law, the Toxic Substances Control Act and the Federal Insecticide, Fungicide, and Rodenticide Act and the processes established by the Federal agencies in these areas are sound. No system is perfect, and the competition between putting a product with a potential great economic, medical, or environmental benefit on the market and delaying marketing until its potential dangers have been evaluated results inevitably in conflict. Still our system works reasonably well. We need to carefully monitor the implementation of these safeguards to insure that the human and fiscal resources are sufficient, that they are used effectively, and that all responsible groups including independent researchers, federal regulatory agencies and private enterprise participate openly and fully in the pre-market testing programs.

ALZHEIMERS

Question. Various studies have linked environmental toxins, specifically aluminum and silica, to Alzheimers. What evidence exists that environmental toxins do indeed cause Alzheimers?

Answer. Humans with Alzheimers disease have been observed to have high concentrations of aluminum in certain tissues of the nervous system. Aluminum is also found in elevated concentrations in the nerve tissues of people who do not have the symptoms characterized as Alzheimers disease. Thus, at present, the scientific evidence does not permit any conclusion that high concentrations of aluminum may or may not be associated with causing the disease. Another hypothesis is that aluminum in conjunction with other environmental factors may be related to the disease. At this point in time there are no other environmental factors which have been indentified with reasonable certainty that may be related to Alzheimers disease.

SEWAGE SLUDGE

Question. I have seen several articles concerning a possible relationship between sewage sludge used as fertilizer and ALS or Lou Gehrig's Disease. Can you tell us anything about that?

Answer. The recent reports in the press connecting the use of Milorganite, a fertilizer made from sewage sludge, and ALS or Lou Gehrig's disease are speculative and need more detailed scientific evaluation. The city of Milwaukee, which manufactures Milorganite, has convened a panel of experts from federal, state, and academic institutions to advise them on the situation. Their preliminary findings indicate that there are no scientific bases for any relationship. A report from this panel is apparently being prepared. At that time we will be better able to decide if any further toxicology studies are needed. The NIEHS has ongoing studies on several of the metal and chemical contaminants found in this fertilizer and these should be of value if additional laboratory studies are under-taken.

CHEMICAL DUMPS

Question. An editorial in the Washington Post referenced an EPA study on the relative ranking of hazards. They apparently don't feel that chemical dumps are a serious problem. What do you think?

Answer. I saw the editorial and immediately asked EPA to send me a copy of their study. After reviewing it, I better understand what was done. I must point out that the EPA study did include chemical waste dumps among the 31 most serious environmental threats. Their conclusion was that chemical waste dumps are not as great a threat to human health, welfare, or the environment as some other problems. I noted that EPA included smoking and occupational hazards in their list of the most serious environmental problems. I certainly agree with that conclusion. However, it was interesting to see that there was good correlation between EPA staff concerning problems which are fairly well understood and characterized, such as radon exposure, cigarette smoking, etc., and the amount of scientific evidence that a risk exists. For problems which are currently being investigated and for which little hard information about immediate health risk is available - such as the threat to health from chemical dumps, EPA staff ranked their risks lower. In my view, we need to know much more about the number and content of the active and inactive hazardous waste storage and disposal sites in the U.S. We also need to know how and where the hazardous materials migrate and who is exposed to what level of mixtures of these hazards. Fortunately, the recently enacted Superfund reauthorization gives NIEHS the authority and resources to conduct basic research in these areas. We have already solicited research grant proposals and studies will begin this fall.

I fully support one of the main conclusions contained in the first volume of the EPA report but not mentioned in the "Post" editorial; there is a serious information gap which must be filled if we are to have the sound scientific data needed to rank and prioritize the environmental risks in this country on any other basis than professional judgment and opinion. I agree with EPA that more research and study is urgently needed.

BIOTECHNOLOGY

Question. Dr. Lindberg, you stated that: "Biotechnology is not only an area of great scientific importance, but it is an area that would benefit greatly by intensive application of automated information systems." Please explain how the Library

can apply its expertise to this area. What are you planning to accomplish this year and next?

Answer. Progress in biotechnology research has come remarkably fast in the last two to three years. Even knowing less than 1% of the human genome, researchers have already been able to produce synthetic growth hormone, insulin, interferon for cancer treatment, and have developed diagnostic tests for Huntington's disease, thalassemia, cystic fibrosis, and very important information about the genetic basis for some kinds of Alzheimer's disease. Progress in this field has been in the technical area of nucleic acid sequence determination as well as in the clinical sphere of applying this new information very rapidly to important health problems.

It is apparent, however, that obstacles to continued rapid progress in this field can be identified in four areas. First, the rate at which new information is produced about such matters as nucleic acid sequencing is so rapid that the systems for acquiring the data and putting them into proper computer databanks have been far outpaced by research progress. Second, there is a lack of compatibility between the dozen or so important computer database systems in this area. That is, data cannot be transferred between the systems, and investigators cannot search the systems in a coordinated manner to understand the importance of the new data that are coming from the laboratories. Third, it is clear that one needs a permanent system for distribution of the information that is the result of public funding of research. Generally speaking, this information is being freely shared through the published literature in the finest tradition of science. However, the form of the discoveries is such that the printed scientific journals are not entirely suitable for this sharing. One needs a permanent and reliable central depository for the information, and means to distribute it and make it available to the individual laboratories where it will do the most good. Fourth, while many of these needs can be satisfied by intelligent application of existing computer technology and systems, the most complex questions and many of the questions that will be asked in the future require further research to create more sophisticated information systems.

NLM has experience in managing many different kinds of database information technologies and in helping to assemble databases that derive from many different sources. The toxicology information systems at NLM and the PDQ cancer information system are examples of this kind of work done in collaboration with other government agencies that have primary responsibility and expertise in these subject areas.

We are now working with NIGMS, DRR, and other NIH institutes to offer advice and a limited amount of help in order to make the creation of certain of the computer databases in biotechnology more efficient and to suggest ways to increase compatibility between them. In addition, we are enthusiastically working with biotechnology scientists at NIH and other researchers such as those funded by the Howard Hughes Medical Institute to contribute our expertise to the development of advanced systems that can benefit these groups of talented investigators.

Some examples of this work include the following:

- o Lister Hill Center researchers are working with Library Operations staff to unify the terminology used by NLM's MEDLINE system with that used in the computer databases that contain nucleic acid protein products information.

- o Lister Hill researchers have created an advanced system for building and accessing McKusick's Mendelian Inheritance in Man file. Essentially, this makes an invaluable textbook available as a computer database.

- o Furthermore, the same system permits at least a small group of investigators at NIH to use the information in these databases in order to support advanced research. This is just the beginning, of course, but this system points the way to what might be possible in the way of service to all relevant U.S. investigators in the future.

- o Lastly, NLM, with the advice of NIH institutes with relevant missions, plans to produce with contract help in 1987 a Directory of Biotechnology Information Resources.

SERVICE TO THE PUBLIC

Question. Last year, the Committee was pleased to hear that NLM planned to maintain its normal hours of service to the public in 1986, despite the funding reductions imposed by the sequestration. Were you actually able to maintain public services at an optimal level?

Answer. We felt it was extremely important to maintain the availability of our resources to the public, so our hours were not cut-back. However, I am sorry to say that the services we are able to offer the public fall short of being optimal. Over the same time, demand for reader services has increased by approximately 60%. Consequently, the staffing for public services is less than what we would like. This has resulted in slow service and delays.

CURRENT SERVICES LEVEL

Question. Dr. Lindberg, on page 431 of your justification you state that acquisition of literature, cataloging, and indexing would be performed at a reduced level if the President's budget were adopted. Aren't these activities important basic library services? How much additional funding would be required to maintain services at the current level in 1988?

Answer. Yes, the acquisition of books and journals, and the cataloging and indexing of the information they contain are fundamental statutory responsibilities of the Library. To maintain all of NLM's services and programs at the current level in 1988 would require an increase of approximately $2,000,000 over the President's request.

UNIFIED MEDICAL LANGUAGE SYSTEM

Question. Special funds were identified to support NLM's project to develop a Unified Medical Language System. How have you used these funds? What progress has the Library made on this project?

Answer. The initial work is going well. First, NLM has produced and distributed through NTIS a system for health care professionals with personal computers. This makes our medical subject headings vocabulary available directly in the office or clinic and allows a doctor with no prior training in database searching to automatically connect to the NLM computer to retrieve information.

Second, NLM has integrated our terminology with PDQ, an important cancer factual database available throughout the United States as a service of the National Cancer Institute and has also begun integration of our medical subject headings terminology with that used by GENBANK, one of the important biotechnology databases.

Third, NLM has selected and is funding six university research groups for a collaborative joint national project. Each of the groups has undertaken to develop a part of what will become the Unified Medical Language System. The schools are Harvard University, University of Pittsburgh, Carnegie Mellon University, Yale University, the University of California at San Francisco, and the University of Utah.

NLM LONG-RANGE PLAN

Question. Your opening statement refers to the completion of a long-range plan for NLM, developed by your Board of Regents. Summarize the recommendations in this plan, including resource levels. What can you do in 1988 at the President's budget level in terms of these recommendations? Which goals do you consider to be the highest priority?

Answer. Background studies by five panels of outside expert advisors to the Board have been completed. The Board of Regents has evaluated and integrated the recommendations of the panels into a final plan for NLM. At the moment the summary document is being printed. This should be forwarded by the Chairman of the Board officially to the Secretary of Health and Human Services, to whom the Board is legally directing its advice. A copy of this report will be submitted for the record immediately after it is available and presented to the Secretary.

TOXNET SYSTEM

Question. Almost every day, it seems, we hear or read about a toxic spill which may threaten the public health and our environment alike. How does the Library's TOXNET system serve the urgent information needs of professionals at the site of a toxic spill? Do you receive "Superfund" support for these programs?

Answer. NLM provides a frequently-used and valuable set of database services dealing with the environmental effects of toxic

chemicals. The various files include information about the nature of the chemicals, their effects, information concerning their safe handling, their effects on people, and procedures for treating dangerous exposures. All of this is available online, 24 hours a day seven days a week to those experts who are called upon to manage major chemical spills--as well as those in government and industry who plan procedures and processes so as to avoid dangerous spills.

NLM's earliest work in this area dates back to 1967 with a continuous and very satisfactory collaboration with FDA, CDC, and in recent years the EPA and the ATSDR. Recently (since 1982) NLM has worked closely with ATSDR on enhancing the content of its databases to be maximally useful to acute responses to emergencies caused by hazardous chemicals as well as for remedial actions on the clean-up of chemical dumpsites. NLM, in concert with ATSDR, is also working on developing improved delivery methods (i.e., software, computer systems) of this information to emergency responders. Superfund resources have been used for these activities.

During the course of the past year there have been several dramatic incidents in which chemical spill emergencies have required repeated and intensive communication between the hazardous substances field teams, and NLM and its databases. This has involved both direct access by the field teams through computers to NLM and telephone mediated search questions. NLM has received compliments and thanks for its information systems support from those managing such emergencies in a number of circumstances during the past year. In 1987 Superfund will provide approximately $1,958,000 for toxicology data creation and file building costs.

MEDICAL INFORMATICS

Question. What will you be able to do in 1988 to support research in universities to develop advanced information systems for medical uses and a cadre of health professionals who know how to use them?

Answer. The Library has a major extramural program called Medical Informatics which supports research and research training in the study of biomedical information, data, and knowledge--their storage retrieval, and optimal use for problem-solving and decision-making. I am pleased to say that this year, in FY 1987, we have been able to double our support for research training in medical informatics. In FY 1988 we will continue that level of training, but funding for investigator-initiated research grants will decrease by approximately $1 million, and we will be able to fund only those awards with commitments from previous years.

NURSING SHORTAGE

Question. The percentage of college freshmen expressing an interest in nursing has dropped from historical levels of approximately 5% of the student body to 2.7% in recent years. In view of the nursing shortage being experienced in this country, what can be done to reverse the declining interest in the nursing profession?

Answer. The National Center for Nursing Research (NCNR) through its research authority is supporting research on the subjects of nurse productivity, what enhances it, what discourages it. Definition of what elements constitute an attractive, productive working environment should increase interest in the profession. It is also believed that the new focus on nursing research provided by the NCNR will attract more of the very bright students to seek an academic/research career in nursing.

It is believed that the National Center for Nursing Research can contribute enormously to enhancing the attractiveness of nursing as a career option. Through time, the Center will develop an expertly trained cadre of scientists who will pursue investigations which will improve nursing practice. The full integration of the nurse into the research team will undoubtedly elevate the rewards and satisfaction of nurses.

To accelerate this process NCNR has introduced two research career awards (the academic investigator award and the clinical investigator award) to encourage promising investigators to remain in nursing research and to create centers of excellence in nursing research. In addition, NCNR will focus attention on post-doctoral research training since this mechanism has proven to be one of the best training grounds for excellently prepared, competitive researchers of the future.

URINARY INCONTINENCE

Question. Urinary incontinence is considered to be one of the leading factors in a family's decision to place an older family member in a nursing home. What is the Nursing Center supporting the area of urinary incontinence, and what results can be expected?

Answer. Urinary incontinence (UI) is a significant problem in both community-dwelling and institutionalized elderly persons. It is clearly a nursing problem. Not only do nursing personnel care for institutionalized patients over a 24-hour period, they also care for and counsel elderly persons in the community and their caregivers.

NCNR is participating with the NIA in funding five cooperative agreements to carry out clinical trials to test the effectiveness of non-invasive behavioral strategies for the treatment of UI in elderly persons. The studies encompass outpatients, who are tested and treated in nurse-run continence clinics, and inpatients in long-term care facilities. Interventions focus on either staff or patients or both, and include such approaches as biofeedback, bladder training, prompted voiding, social reinforcement, and special exercises for better control of urination. Cost of UI and its treatment is also examined in some of the studies.

When these five studies have been completed, an assessment must be made of the results of this work along with the results of research previously conducted by others. It is expected that judgements can then be made regarding the most effective non-invasive strategies for the treatment of urinary incontinence in the elderly. Further, the data should allow evaluation of the characteristics of individuals and the circumstances under which a treatment is likely to be effective; as well as any followup needed

to maximize the results of the basic treatment. For example, a certain treatment may be quite effective for alert nursing home residents, but less effective for those who are not well oriented to reality; and periodic retraining may be required to retain the effect at a reasonable level. It is also expected that there will be data about the cost of urinary incontinence in nursing homes and about the cots of reducing it.

In addition to the collaboration with the national Institute on Aging, the NCNR is supporting another study on urinary incontinence. Research has been initiated to determine the ability of a bioinstrument (the Biolog unit) to reliably detect incontinent episodes for elderly who suffer urge/functional urinary incontinence, and to evaluate the acceptability of its presence and use. The Biolog Unit consists of a 12 ounce portable microcomputer worn on a belt at the waist. Attached to the Biolog Unit is a small temperature sensitive probe which allows for an individual's external body temperature to be recorded every minute to 0.01 degree centigrade accuracy. When incontinence occurs, the temperature of the urine, which is greater than the external body temperature, is recorded as an abrupt increase. Then, as cooling takes place, temperature recordings will drop below the mean external body temperature. Thus, an incontinence episode is characterized by an abrupt increase in temperature followed by a decrease. When the individual's pattern of voiding can be established during three days of continuous monitoring, it can be appropriately anticipated.

A second purpose of the study is to test the efficacy of a behavioral treatment called Patterned Urge-Response Toileting (PURT) on: (1) the frequency of incontinent episodes and volume of urine; (2) the incidence of complications, e.g., skin irritation and urinary tract infection; (3) the psychosocial well-being of the incontinent nursing home patient; (4) the knowledge and attitudes of nursing personnel caring for incontinent patients; and (5) facility costs for incontinence care. Results from this study will provide nursing homes with a practical, cost-effective strategy for managing urinary incontinence and for identifying patients who would be most likely to benefit from this intervention.

NURSING INTERVENTION STUDY

Question. The Nursing Center is supporting a new study to validate the commonly held theory that certain nursing interventions (positioning, suctioning, back-rubbing) improve the oxygenation status of critically ill patients. Would you please elaborate?

Answer. The nursing care of critically ill patients includes routine nursing interventions such as positioning, suctioning, and back rubbing. However, these nursing actions may jeopardize a patient's oxygen balance by increasing oxygen consumption and/or decreasing oxygen supply. To meet the increased oxygen expenditure required by these activities, the patient's cardiopulmonary system must increase the supply of oxygen to the cellular level. Critically ill patients may not be able to adapt easily to these increased oxygen demands.

A newly initiated study will investigate the effects of these

three nursing interventions (positioning, suctioning, and back rubbing) on the oxygenation status of critically ill patients. Approximately 180 adult patients who are in critical care units in four hospitals and who meet selected criteria will participate in this study.

The recent introduction of the oximeter system into intensive care settings permits continuous monitoring of a patient's mixed venous oxygen saturation (Sv02) level, an indicator of the balance between oxygen delivery and oxygen demand. In addition to this measurement, the effects of these interventions on other cardiovascular parameters of cardiac rate and rhythm, pulmonary artery pressures and arterial pressures will be investigated. Patients who have clinically significant decreases in continuous mixed venous oxygen saturation will be identified. Changes found with each of the three interventions and cumulative effects of the interventions will be analyzed. Trends in Sv02 changes will be identified and correlated with other physiological variables.

The findings from this research will identify the effects of these nursing actions on critically ill patients' oxygenation status, provide the basis for proposing changes in nursing interventions to minimize Sv02 decreases, and suggest modifications the nurse may use to enhance the patient's adaptive responses.

Questions Submitted by Senator Daniel K. Inouye

COLLABORATION WITH OTHER INSTITUTES

Question. For the past several years the Committee has asked the Director of the National Institutes of Health to ensure that the expertise of professional nursing is appropriately recognized by the various Institutes of the NIH. Specifically, we have asked for follow-up reports on the recommendations of the Director's Nursing Task Force. Would you please provide us with such a report and further address the extent to which the Nursing Center has been able to work collaboratively with the other Institutes.

Answer. The "Follow-up Report on the Implementation of the 1984 Report to the Director of the Task Force on Nursing Research" was forwarded to the Senate on February 17, 1987. That report delineates specific responses by the NIH BID's to the initial Task Force recommendations.

Regarding collaborative efforts between the National Center for Nursing Research (NCNR) and other NIH Institutes, NCNR has been working closely with virtually all Institutes since its establishment at NIH in April 1986. For example, in FY1986 NCNR supported over $1.5 million in collaborative research projects with other Institutes. This included specific projects in smoking cessation, self-management of asthma, and the size of myocardial infarct site after the use of intraveneous streptokinase with the National Heart, Blood and Lung Institute; urinary incontinence studies with the National Institute on Aging; studies related to post-date pregnancies at maternal-fetal units supported by the National Institute of Child Health and Human Development; and data retrieval and delivery systems for nurses with the National Library of Medicine. In addition, NCNR was able to support a project on

risk assessment related to the mother-child interaction which had originally been assigned to the Alcohol, Drug Abuse and Mental health Administration's National Institute of Mental Health.

NCNR is also collaborating with other Institutes in some new initiatives for FY1987 and beyond. NCNR published a program announcement encouraging applications from nurse investigators working in well-established NIH supported centers and clinical trials. It is expected that these projects will complement ongoing research activities supported by other Institutes. NCNR has also announced postdoctoral research training opportunities for nurse scientists in the intramural laboratories of nine NIH Institutes, the NIH Clinical Center, and ADAMHA. Furthermore, NCNR has joined other NIH Institutes in announcing a new initiative in research related to pain and analgesia. NCNR continues to work closely with the National Cancer Institute in support of its Request for Applications regarding home care for cancer patients.

CHILDHOOD INJURY

Question. For the past three years Congress has expressed its interest in seeing additional research conducted on the prevention of childhood injuries. This concern reflects the fact that such injuries, which are usually preventable, are the largest cause of death and disability for children under the age of one. Would you briefly catalogue for the Committee the efforts you have made over this three year period to address this issue? How many requests for grant applications have been issued, and how many grants have been awarded? What activities do you intend on carrying out in the near future to address the problem of preventable childhood injuries?

Answer. Research on risk-taking behavior has been an ongoing interest and activity of the NICHD. In 1985, the Institute issued a request for applications for research to clarify major behavioral and environmental variables responsible for specific kinds of childhood injuries. Currently, two projects with a total cost of $388,251 over two years comprise the research supported by the Institute which is specifically directed at childhood injury. These projects deal with home hazards. One is designed to assess the relationship between home hazards and childhood injuries and to analyze the behavior of parents and children in the presence of real and contrived hazards. The second uses a detailed analysis of factors existing within families to maintain a child's safety.

To further encourage and strengthen research in childhood injury, the Institute conducted a workshop in September 1986 to formulate important research questions and to identify key methodologies needing further development. Proceedings of the workshop are being prepared to stimulate interest in childhood injury research and for guidance in pursuing such research. Finally, an initiative for research in childhood injury over the next five years has been developed and presented at the request of the Congress. This initiative includes contracts for development of methodologies, two RFA's for grants to investigate etiologies and interventions, a network for clinical trials, and a series of conferences.

RELATIONSHIP BETWEEN MENTAL RETARDATION AND CHILD ABUSE/NEGLECT

Question. The March 1987 report on NIH Health and Behavior Research suggests that NICHD will be funding research on the relationship between mental retardation/developmental disabilities and child abuse and neglect. I'd like to commend NICHD for making this a research priority and would simply like to ask what aspects of this issue NICHD plans on pursuing and whether they will be coordinating their activities with other concerned agencies, such as NIMH and the National Center on Child Abuse and Neglect?

Answer. Since it was established, the NICHD has been interested in the effect of the interaction of families, especially the mother and father, upon their children's growth and development. The results of these studies have provided valuable information about the conditions which can be the antecedents of child abuse and neglect, information which can be useful in developing child abuse and neglect prevention programs.

Recently, there has been a trend toward deinstitutionalization of mentally retarded children. The NICHD is, therefore, studying the mutual impact of mentally retarded children on their families and of the families on their mentally retarded children. Knowledge gained from such studies may lead to improved support services to these families and help prevent the abuse and neglect for which some of these children are at risk.

A member of the NICHD staff serves on the National Child Abuse and Neglect Board. Through this Board the NICHD shares its research activities with the NIMH, the National Center on Child Abuse and Neglect and all other Federal agencies concerned with this important national problem.

SUICIDE

Question. There has been a lot of attention in the past few weeks devoted to the problem of youth suicide. It would seem that the issue of suicide amongst the elderly receives scant attention even though this population has the highest suicide rate of any age group. Is the National Institute on Aging supporting any research regarding elderly suicide?

Answer. In 1984 suicide was the fourteenth leading cause of death for those aged 65 and over. Given the stigma attached to suicide as well as a set of definitional problems, this is probably an understatement of its extent.

The Institute is supporting two extramural studies that deal with suicide among older people. One demographic study is investigating causes of death within the older population. This study is utilizing data on multiple causes of death. The study is thus able to investigate the pattern of diseases such as cancer that may be associated with suicide. A recent discovery by the study is the rapidly increasing rates of suicide among black males over age 75. The second study is investigating at an aggregate level the relationship between such demographic, economic and benefit policy changes as the increased size of the older population, improved social security benefits, etc., and changes in the suicide rate.

Question. What are the risk factors for suicide among the elderly? What is the relationship between suicide and health or mental disorders?

Answer. Within the older population, suicide rates are nearly five times higher for men than for women. The rate for men over age 65 is about 33.5 per 100,000, while for women, the rate is only 7.3 per 100,000. Among males, whites have a rate nearly three times higher than the rate for blacks. Among older white males suicide rates increase with age. Demographic risk factors thus include being male, white, and being very old.

A number of risk factors for suicide among older people have been proposed, including financial strain, social isolation, a low level of social integration, poor health including loss of functional ability and the existence of multiple chronic diseases, spousal bereavement or terminal illness, fear of the impact of costs of illness on surviving spouses, depression, hopelessness, loss of autonomy, and a tendency to direct anger inwards toward the self.

Several of these risk factors and their exact relationship to suicide among older people have not been well characterized, and there are important demographic and epidemiological gaps in our knowledge. Thus, for example, while the relationship between clinical depression -- which increases with age, and which can have preventable and curable psychosocial and medical causes -- and suicide has been quite well specified, the relationship between poor physical health -- especially of a terminal nature -- and suicide has been much less well characterized. Knowledge is scarcest where suicide rates are highest, e.g., among the oldest old males.

The forthcoming joint program announcement by NIA and NIMH on the interrelations between psychological functioning and health should provide some useful information in this area. A new initiative in gender differences will also add to our knowledge of the sex imbalance. However, to adequately understand the increase in suicide, a separate initiative that focuses on the epidemiology and demography of suicide with special attention to very old males, will be necessary.

Question. What is known about prevention measures that can be implemented to decrease the suicide among the elderly?

Answer. An essential fact for any prevention program is that suicide is likely to be one of the most preventable of the leading causes of death among the elderly. Any prevention measures need to rest on both a firm epidemiological and demographic scientific base as well as a solid clinical base. While some clinical manuals for mental health practitioners are available, we need to have better measures of detection or diagnosis of impending suicide attempts as well as appropriate medical, mental health, and social interventions. The lethality of suicide attempts varies considerably, so that in some instances an attempt that does not succeed is often a cry for help. Among older males however, most suicide attempts are unfortunately lethal. Any program should thus emphasize early detection.

INTERDEPENDENCE OF GENERATIONS

Question. There has been considerable debate on the issue of the interdependence of generations versus intergenerational inequity. One side of the debate argues that generations receive and give to one another throughout the life span, the other frames their arguments in terms of the competition for resources between the young and old. Is the National Institute on Aging supporting research, or sharing in research efforts with NICHD, that can shed light on this debate? For instance, what are the psychological and sociological aspects of help and sharing between generations?

Answer. As discussed in the media and public debates, it is argued that older people, at the expense of children, are receiving more than their fair share of resources. It is true that older people as a group have recently improved their relative economic position, but this is because new cohorts have been entering old age with more favorable career experiences than their predecessors. Income continues to decline for cohorts of older people as they grow very old. Many segments of the older population live below the poverty line, with the rate being significantly higher for women, especially black women living alone.

Over the years, the National Institute on Aging has supported many projects on intergenerational relations. The prevailing finding is that the ties between generations of the family remain strong and that family members are concerned for the well-being of both younger and older family members. Investigations by social scientists have clearly demonstrated that older people are not isolated from ties of family and kinship. It is well-known that although many older Americans live alone, most see children and grandchildren frequently. For most older Americans, the family is the first line of support. For that minority of older people who do need assistance with activities of daily living, family members provide a great deal of assistance, often without outside help. At the same time, research on social support shows that older people give more support -- reassurance, confidence, respect, care when ill -- than they receive. Research also shows that individuals give and receive resources throughout life.

It should be kept in mind that many benefits accruing to older people also benefit their children, and that many important exchanges also occur between generations of the young old and the old old. It is also important to remember that older people are "our future selves" and everyone relates to older or younger family members. As the recent report from the Gerontological Society of America (The Common Stake: The Interdependence of Generations) demonstrates, generations do have a common stake in well-being of people of all ages.

More needs to be learned about economic transfers and help patterns and unpaid but productive activities. Continued research is also needed in the area of intergenerational relations. The family itself is undergoing many changes. Working with the NICHD, NIA is planning a jointly sponsored workshop, to focus the research issues in intergenerational relations. The workshop will be followed in 1988 by a jointly sponsored Request for Applications. Examples of topics which may be addressed include: determinants and consequences of family caregiving for older and younger family members; consensus,

conflict, and cohesion among the multiple generations of families; grandparent-grandchild relationships following divorce in the middle generation; family relationships and health; and others.

MENTAL HEALTH ASPECTS OF PHYSICAL ILLNESS

Question. There is increasing clinical recognition that a major public health issue affecting older adults is the impact of mental health status on the overall course of physical health and physical illness with aging. This is an issue of concern to this Congress as it looks for ways to control rising health care costs. What research is the Institute supporting to explore the interplay between coexisting physical and mental disorders, on the consequences of severe psychological stress on physical health, and on the effect of physical disorders on mental disorders?

Answer. The NIA supports research and research training in the interplay among aging, mental processes and physical disorders such as diabetes, Alzheimer's disease, hypertension, Parkinson's disease, low vision, hyposmia, presbycusis, and cardiovascular dysfunction. These studies, as well as others, suggest that disease acts to accentuate the psychological impairments seen in normal and pathological aging.

On the other hand, there is a growing appreciation of the influence that psychological factors have upon the disease process. NIA staff recently have been part of a Kellogg Foundation supported workshop on the effects of social isolation of older people upon health. Staff also have worked with the WHO in developing an international approach to the question of stress, brain, immunity, and disease. Currently planned is a program announcement to stimulate research on Neuroendocrine Factors in the Aging Immune System. The Neuroscience and Neuropsychology of Aging program now supports three research studies in this area and is actively encouraging more such proposals.

The NIA Behavioral and Social Research program supports research on factors affecting the psychosocial functioning and quality of life in older persons. Research focusing specifically on psychiatric diagnoses has traditionally gone to the National Institute for Mental Health (NIMH). However, in recent years the NIA has been collaborating with NIMH on research related to the interaction of physical illness with mental disorder in later life.

In 1984, NIMH, in collaboration with the Working Group on Health and Behavior, NIH -- of which NIA is the lead agency -- held an international conference on "Mental Health Aspects of Physical Diseases in Late Life" in order to analyze the literature, issues, and research findings in this field and to identify research topics and directions. As a result of this conference NIMH and NIA are currently preparing to co-sponsor a new research initiative on the "Interaction of Mental Disorder and Physical Illness in Later Life." Several general research topics pertaining to mental health aspects of physical diseases in old age have been targetted in this announcement including:

- Research on the impact of symptoms of mental disorders on the course and onset of medical illness and on response to treatment;

- o Systematic studies evaluating the impact of physical disorder on the development and course of psychiatric symptoms and/or illness;

- o Research on the effect of treatment for medical conditions, broadly defined, on mental, emotional and behavioral status;

- o Investigations of the impact of psychiatric treatment on physical status.

NEUROSCIENCE AND NEUROPSYCHOLOGY OF AGING PROGRAM

Question. The Institute recently completed a reorganization of its extramural research activities, shifting oversight of Alzheimer's disease and cognitive psychology research efforts to the newly created Neuroscience and Neuropsychology of Aging Program. The Congress has been strongly supportive of NIA's research activities. Are the resources of the Institute sufficient to support this new program area? What mechanisms will be used to assure that the diversity of research included in the new program will be maintained, that center grants, for example, will not preclude adequate support for individual researcher grants, and that the vital research being conducted on Alzheimer's disease will not preempt important research in neuropsychology and cognitive psychology?

Answer. The Neuroscience and Neuropsychology of Aging Program (NNA) will administer Alzheimer's disease research as well as research in the neuroscience of aging and a portion of our cognitive psychology research program. Research into cognitive psychology has been divided into two sections. The section administered by NNA focuses on those aspects of cognition which most nearly overlap neuropsychology. Research which emphasizes studies on understanding how aspects of cognition influence and are influenced by external environmental factors and internal noncognitive processes -- such as motivation and chronic illness -- will remain within the NIA Behavioral Sciences Research Program.

The newly created Neuroscience and Neuropsychology of Aging Program represents one of the most rapidly expanding research programs within the Institute. Currently, about 28% of the research project grant budget is within this program area; this does not include the center grants which fall within the Centers budget line. While Alzheimer's disease (AD) research continues to be the Institute's principal priority, diversity within the program will be maintained by the priority assigned to investigator-initiated research proposals by the scientific review groups, and by special research initiatives. For FY 1988, Requests for Application are planned in such areas as the biochemical diagnosis of AD, standardization and validation of MRI in the diagnosis of dementias, molecular genetics of familial AD, idiopathic tremors in older people, and neuronal transplants in treatment of dementias.

In addition, the following Program Announcements have been or will be issued, and will require FY88 funds:

- o The Epidemiology of Alzheimer's Disease and Other Dementias of Aging;

- o Age, Hearing, and Speech Comprehension;
- o Neuroendocrine Factors in the Aging Immune System;
- o Research Training in Geriatric Otolaryngology;
- o Calcium Metabolism in the Aging Nervous System.

Questions Submitted by Senator Lowell P. Weicker, Jr.

BUDGET REQUEST

Question. Does your budget request include out-year funds to level fund research project grants?

Answer. The 1988 budget request assumes carryover of $35,011,000 from 1987 to support 1,907 research project grants, approximately the same level as the 1987 current estimate. In addition, the 1988 budget request includes $254,258,000 for continuation costs of competing awards made in 1988.

Question. What is your request without these funds?

Answer. The 1988 budget request excluding the carryover from 1987 and the advanced appropriation of $254,258,000 is $423,193,000.

Question. How much is cut in FY87 as part of your FY88 request?

Answer. The current proprosal is to carry over $35,011,000 from the 1987 appropriation to FY 1988.

Question. What was your original budget request for FY88?

Answer. The orginal budget request for FY 1988 was $615,724,000 including funds for AIDS research.

AIDS RESEARCH

Question. Dr. Goldstein, I understand neurological symptoms may be the earliest or only evidence of the AIDS virus in a significant number of adults and children. Would you please highlight some of the neurological issues related to AIDS?

Answer. Some of the neurological issues related to AIDS include: recognition and diagnosis when the earliest or sole manifestation of infection is neurological; management and treatment of the primary viral and secondary opportunistic infections of the brain; and eradication of the virus that may be sequestered in the brain and protected by the blood brain barrier.

Question. What impact will dementia and other neurological problems have on the way we will need to care for some AIDS patients?

Answer. The impact of dementia and other neurological problems on the care of AIDS patients is severe and in some ways

reminiscent of the problems of dementia in the elderly. The health team caring for the AIDS patients must include providers specially trained to deal with the cognitive, neurological, and neuromuscular problems that AIDS patients frequently experience.

Question. What impact will that have on the costs for that care?

Answer. The impact on costs for the care provided to patients suffering AIDS of the nervous system will surely be considerable. Care of the neurologically disabled demands specialized providers who must respond to the wide ranging needs of the neurologically impaired including their memory problems and difficulties in movement and self care. Although the duration of treatment of an individual is limited by the short life span of those afflicted, the demands on personnel, facilities, and costs can be expected to grow as interventions that arrest the progress of disease are found and as the numbers of affected individuals multiply.

EPILEPSY

Question. Dr. Goldstein, how much money is included in your budget request for epilepsy research?

Answer. The Institute's 1988 estimate for epilepsy research is $31,468,000.

Question. What is the focus of this research?

Answer. Epilepsy research is focused on basic mechanisms, causes, prevention, diagnosis, and treatment of the epilepsies. About half of the epilepsy expenditure is devoted to basic studies of cell excitation and interaction related to the basic mechanisms of epilepsy and includes studies of immunology, pharmacology, electrophysiology, and cerebral metabolism. About one-third of the Institute's expenditure is devoted to studies of new antiepileptic drugs, including the Antiepileptic Drug Development Program and clinical studies. A small part of the portfolio is devoted to development of new technology relevant to the study of epilepsy.

Question. Have there been any new developments in this area?

Answer. Research progress on epilepsy has been made possible by the development of new technologies. Magnetic resonance imaging (MRI), that better identifies structural abnormalities, and positron emission tomography (PET), that defines metabolic activity, provide new ways to obtain both structural and metabolic information about the brain in epilepsy. In addition, the Institute is supporting the development of magnetoencephalography (MEG) that will provide information about magnetic fields generated by seizure activity in the brain.

Progress also continues in the development of drug treatment of epilepsy. Each year the Institute's Antiepileptic Drug Development Program tests over 1,000 chemicals for activity against seizures. At the present time, over 30 potential drugs are at

various stages of clinical evaluation for use in the treatment of epilepsy.

Significant advances in understanding the pathophysiology of epilepsy are also providing new advances in the surgical management of epilepsy.

CLINICAL TRIALS

Question. How many clinical trials will you fund in FY87?

Answer. We plan to fund 39 clinical trials including nine major new trials in FY 1987.

Question. How many are ready to be funded in FY88?

Answer. There are six major new clinical trials that could be funded in FY 1988 if funds were available.

Question. How many will you fund under your current budget proposal?

Answer. There are no major new clinical trials in the 1988 budget request.

Question. Specifically, which ones would not be funded?

Answer. The following clinical trials would not be funded under the current 1988 budget proposal. The total 1988 estimated cost is $6,815,000.

1. Study of Copolymer I in the treatment of multiple sclerosis.

FY 1988 estimate	$1,000,000
Total projected cost	3,000,000

2. Development of vaccine for the treatment of otitis media.

FY 1988 estimate	2,145,000
Total projected cost	6,645,000

3. Study of heparinoids for the treatment of stroke (prevention of blood clots).

FY 1988 estimate	2,145,000
Total projected cost	11,145,000

4. Study of calcium blocking agent for the treatment of acute spinal cord injury.

FY 1988 estimate	500,000
Total projected cost	1,575,000

5. Efficacy trial of a new antiepileptic drug in patients with complex seizures.

FY 1988 estimate	500,000
Total projected cost	1,000,000

6. Study of Cyclosporin A for the management of autoimmune disorders including myasthenia gravis, and Guillian-Barre syndrome.

FY 1988 estimate	525,000
Total projected cost	1,600,000

BUDGET REQUEST

Question. Does your budget request include out-year funds to level fund research project grants?

Answer. The FY 1988 budget request for the National Institute for Arthritis and Musculoskeletal and Skin Diseases includes $78,064,000 of out-year funds to fund the commitments generated from new and competing research project grant funded in FY 1988.

Question. What is your request without those funds?

Answer. The FY 1988 budget request is $132,089,000 without the additional $78,064,000 for future year commitment for research project grants.

Question. How much is cut in FY87 as part of your FY88 request?

Answers. The FY 1988 budget request includes a proposal to extend the availability of $9,080,000 of FY 1987 appropriated funds through FY 1988. This FY 1987 reduction of $9,080,000 would reduce the number of competing research project grants by ten. Both competing and noncompeting research project grants would be negotiated downward about 14.3 percent.

Question. What was your original budget request for FY88?

Answer. The National Institute for Arthritis and Musculoskeletal and Skin Diseases original FY 1988 budget request to NIH was $185,370,000.

LOW BACK PAIN

Question. Dr. Shulman, in your prepared statement you report that the economic impact of back and spine impairments exceeds $10 billion dollars each year. Yet, you also indicate the causes of low back pain and the best way to treat it are both unclear.

How much of your FY88 budget will be spent on back and spine impairments?

Answer. We estimate that we will spend about $1,400,000 in FY 1988 on low back pain and spine impairments, such as scoliosis.

Question. Do you have any specific research plans in this area?

Answer. Yes, we do have plans to stimulate research in the area of low back pain. This is a difficult area that needs a multidisciplinary approach. In 1981 we sponsored a major conference on low back pain, hoping to stimulate research in this area. The initial positive response has since subsided. We are now planning with the American Academy of Orthopedic Surgeons another major scientific workshop to try again to encourage research efforts in the important areas of biomechanical, biochemical and neuromuscular factors operative in low back pain.

CLINICAL TRIALS

Question. How many clinical trials will you fund in FY87?

Answer. In FY 1987 the National Institute of Arthritis and Musculoskeletal and Skin Diseases plans to fund 15 clinical trials for an estimated $3,925,000.

Question. How many are ready to be funded in FY88?

Answer. In addition to the 15 clinical trials from FY 1987 that will continue in FY 1988, we have identified four new clinical trials that we are ready to begin.

Question. How many will you fund under your current budget proposal?

Answer. Under our current FY 1988 budgaet proposal, we can begin two of the four new clinical trials that are ready to start.

Question. Specifically, which ones would not be funded?

Answer. The two major new clinical trials that would not be funded under the FY 1988 budget request are:

- Efficacy of Calcitonin in the Treatment of Osteoporosis
- Use of 13-cis Retinoic Acid and Other Retinoid Derivatives in Treating Keratinizing Disorders.

FY 1988 BUDGET REQUEST

Question. Does your budget request include out-year funds to level fund research project grants?

Answer. The FY 1988 budget request includes $171,204,000 to fund future year noncompeting commitments for competing research project grants awarded in FY 1988.

Question. What is your request without those funds?

Answer. The FY 1988 budget request for NICHD, not including the $171,204,000, is $345,436,000.

Question. How much is cut in FY 1987 as part of your FY 1988 request?

Answer. It is proposed to extend the availability of $23,404,000 from FY 1987 into FY 1988.

Question. What was your original budget request for FY 1988?

Answer. The Institute's original request to NIH for FY 1988 was $449,734,000.

SUDDEN INFANT DEATH SYNDROME (SIDS)

Question. Dr. Alexander, what new advances have there been in developing techniques for reducing the incidence of sudden infant death syndrome?

Answer. The exact causes of SIDS have not yet been determined. However, an important epidemiological study, supported by NICHD, has shown that the percentage of low birth weight infants is increased among SIDS cases by almost four-fold over random control infants. Concurrently, three maternal factors were found to be associated with the highest SIDS risk: (1) smoking during pregnancy; (2) mother's age at first birth less than 20 years (teenage pregnancy); (3) mother's education less than high school graduate. The occurrence of these risk factors in SIDS families provides the foundation for the support of studies in high-risk pregnancy and fetal development in addition to those research programs specific to SIDS. New knowledge in these areas of research will facilitate the understanding of SIDS, and the development of preventive measures.

In addition, the Institute held a consensus development conference on "Infantile Apnea and Home Monitoring" on September 29, 30 and October 1 of 1986 to explore questions on the possible relationship of apnea to infant mortality and morbidity. The statement developed at the conference stated that the relation of neonatal and infant apnea is that of two separate problems, each with an unclear relationship to mortality and morbidity in infancy. It stated that presently available monitors appear to be safe, but their efficacy needs additional study and technology must be advanced. Beneficial and adverse effects of monitoring were noted, and the need for further study was identified. The importance of adequate support systems for care providers was stressed. The statement noted that effectiveness of home monitoring in reducing infant mortality and morbidity has not yet been established. Recommendations were made to monitor selected high-risk infants, but routine monitoring or screening of normal term or preterm infants was not recommended. It was noted that for certain patients the evidence is inconclusive and that decisions to monitor would have to be made on an individual basis.

ADOLESCENT PREGNANCY

Question. Dr. Alexander, I understand your Institute contributed to the National Academy of Sciences' Report Risking the Future: Adolescent Sexuality, Pregnancy, and Childbearing. Would you highlight the findings in this report?

Answer. The NAS Panel on Adolescent Pregnancy and Childbearing concluded its 24-month tenure with a two-volume report entitled Risking the Future: Adolescent Sexuality, Pregnancy, and Childbearing. Much of the research upon which the Panel relied for

data had been supported by the NICHD. The report reflects the complexity of the problem of fertility-related behavior. The report contains many useful tables; reviews of relevant research; background material; and detailed research, data, and program recommendations. The committee came to six general conclusions, which are briefly reported below:

1. In both human and monetary terms, it is less costly to prevent pregnancy than to cope with its consequences, and it is less expensive to prevent a repeat pregnancy than to treat the compounded problem. Therefore, prevention of adolescent pregnancy should have the highest priority.

2. Sexually active teenagers, both boys and girls, have the ability to avoid pregnancy if they have the motivation to do so. Early, regular, and effective contraceptive use results in fewer pregnancies.

3. Boys' attitudes, motivations, and behavior are as central to the problem as those of their female partners, and they must also be central to the solutions.

4. Young people need to develop the necessary capability to make and carry out responsible decisions about their own sexual and fertility behavior.

5. If trade-offs are to be made in addressing the special needs of one group over another, priority should be given to those for whom the consequences of an early, unintended pregnancy and birth are likely to be most severe: young adolescents and those from the most socially and economically disadvantaged backgrounds.

6. Responsibility for addressing the problems of adolescent pregnancy and childbearing should be shared among individuals, families, voluntary organizations, communities, and governments. Families have the responsibility of teaching human values. Federal and state governments and community institutions should supplement rather than detract from that role.

Question. What recommendations does this report make?

Answer. In their recommendations for policies and programs, the Panel on Adolescent Pregnancy and Childbearing had three major goals.

The first goal was to reduce the rate and incidence of unintended pregnancy among adolescents, especially among school-age teenagers. They recommended that this be accomplished by developing and evaluating programs to enhance life options of teenagers, and by developing and evaluating programs to delay sexual initiation. Specific recommendations included aggressive public education about the safety of the pill for use by teens, continued public support for contraceptive services to adolescents, inclusion of information on contraceptive methods in sex education programs, reduction of the cost of contraceptives to teens, development and evaluation of school-based clinic models, development and evaluation of condom distribution programs, and development and testing of contraceptive advertising aimed at teens.

The second major goal of the Panel was to provide alternatives to adolescent childbearing and pregnancy. Specifically, the Panel recommended that minor adolescents should be encouraged but not required to involve their parents and partners in decision making, that abortion services should include decision counseling and contraceptive counseling, and that comprehensive care should be provided to pregnant girls who choose adoption as an alternative to parenthood.

The third major goal was to promote positive social, economic, health, and developmental outcomes for adolescent parents and their children. The Panel recommended that contraceptive services be available to adolescent parents at low or no cost, that educational and employment programs be available to pregnant girls and teenage parents, both male and female, that case management capabilities be used to make sure adolescent parents obtain the supports and services they need, and that parenting education receive special attention and emphasis.

The Panel also recommended the following regarding data collection and research: that evaluation to measure the costs, effects, and effectiveness of service programs be an essential component of intervention strategies; that data systems that monitor fertility and fertility-related behaviors should be maintained and strengthened; that a broad-based research program on adolescent sexuality and fertility to enhance understanding of the causes and consequences of these behaviors and to inform policy and program development be maintained and strengthened; and that Federal funding agencies, private foundations, and researchers cooperate in designing, implementing, and evaluating experimental approaches for pregnancy prevention among high-risk adolescents and for improving the well-being of teenage parents and their children.

Question. How many clinical trials will you fund in FY 1987?

Answer. The following is a list of the current major clinical trials of the NICHD.

Prevention of Cytomegalovirus (CMV) Disease
Effects of Maternal PKU on Pregnancy Outcome
Prematurity and Gestational Genitourinary Infections
Effects of Tonsil-Adenoid Surgery on Throat Infection
Extracorporeal Membrane Oxygenation (ECMO) in Newborn Respiratory Failure
Strict Control of Diabetes in Pregnancy
Spermicides and Sexually Transmitted Diseases
Phase II Clinical Studies with LHRH Agonists
Human Biochemical Genetics
Growth Hormone Releasing Factors
Physiology of Puberty
Mechanism of Pubertal Growth
Protein Requirements of Infants and Children
Iron Deficiency Anemia and Infant Behavior
Perinatal Effects of Support During Labor
Treatment Evaluation in Premenstrual Syndrome Patients
Comparison of Chorion Villus Sampling and Amniocentesis
Clinical Pharmacology of LHRH Antagonists
Development and Testing of Improved Spermicidal Contraceptives

Prevention of Intrauterine Growth Retardation by Bed Rest
Evaluation of a Polyvinyl Vaginal Contraceptive Sponge
Treatment of Obesity in Children and Adolescents
Calcium and Phosphorus Nutrition in High Risk Infants
Prevention of Otitis Media in Infants
Effects of Growth Hormone Therapy on Children with Extreme Short Stature
Intervention Strategies in Gestational Diabetes Mellitus
Clinical Studies with Capronor Implantable Drug Delivery System
Clinical Trial of New Drug Therapy in Treatment of Nephropathic Cystinosis
Efficacy of Routine Ultrasound Screening in Pregnancy
Pertussis Trials in Sweden
Infant Heme Catabolism and Carbon Monoxide Detection
Neuroendocrine-gonadal Function in Puberty
Clomiphene and Tamoxifen in Oligospermic Infertility
Adaptive Behavior and Treatment Effects in the MR
Long-term Consequences of Amenorrhea
Human Arginase and Arginase Deficiency
Protein and Energy Intakes on Growth and Metabolism
Adaptations to Exercise in Pregnancy
Cellular Pathophysiology of Hepatic Fibrosis
Metabolic Effects in Users of Oral Contraceptives
Progesterone Level Changes Following Tubal Sterilization
Infant Health and Development Program
Better Babies Project
Pathophysiology and Treatment of Human Genetic Diseases
Clinical and Basic Studies of Male Reproduction
Steroid Antagonists
Structure, Function and Physiology of Glycoprotein Hormone
Physiology of Corticotropin Releasing Hormone
Hypothalmic-Pituitary-Gonadal Interaction
Adrenal Physiology and Pathophysiology
Immune Response to Conjugate Vaccines
Typhoid Fever
DNA Human Growth Hormone
Sex Steroid Therapy in Hypogonadal Males
PC Program for Management of Diabetes
Single Late Luteal Dose of RU 486
Spermicides Against AIDS in High-risk Women
LHRH Antagonist as Male Contraceptive
Barrier Contraceptives Against AIDS
MFMU Network: Induced Delivery in Post-term Pregnancy
NICU Network: Tolazoline treatment of PFC
Effects of RU 486 on Endometrial Morphology
ACTH/Hypothalamic-Pituitary-Adrenal Axis

Question. How many are ready to be funded in FY 1988?

Answer. There are 15 major new clinical trials that could be funded in FY 1988.

Question. How many will you fund under your current budget proposal?

Answer. At the FY 1988 President's Budget request, the NICHD will not be able to fund any major new clinical trials.

Question. Specifically, which ones would not be funded?

Answer. The proposed major new clinical trials that will not be funded in FY 1988 are:

(1) Clinical Trial of Hemophilus influenzae Vaccine. The bacteria Hemophilus influenzae is the most common cause of meningitis and a leading cause of acquired mental retardation in infants and young children despite antibiotics. A vaccine developed some years ago is effective only in older children (who are not the prime candidates for this disease). The newest vaccine appears to be effective in very young infants, but large clinical trials will be necessary to confirm efficacy and safety. First Year Cost: $500,000; Total Projected Cost: $1,500,000.

(2) Evaluation of Low Dose Aspirin Therapy in the Prevention of Pre-Eclampsia. Pregnancy induced hypertension at its earliest or pre-eclampsia usually appears after the 24th week of gestation. Hypertension is a major cause of maternal and perinatal mortality. Recent studies have shown that daily administration of aspirin, in low doses, has been beneficial in preventing severe manifestations of hypertension. A randomized clinical trial would help in determining the true value of this therapy for this significant health problem. First Year Cost: $1,000,000; Total Projected Cost: $2,500,000.

(3) Therapeutic Antibiotic Trial to Delay Birth and Perinatal Morbidity in Mothers with Preterm Premature Rupture of Fetal Membranes. Controversy exists for the management of patients with preterm premature rupture of fetal membranes. Issues not resolved involve consideration of maternal and fetal advantages and disadvantages regarding prolongation of the latent period. A protocol is being developed to carry out a random clinical trial with the administration of prophylactic antibiotic and tocolytic agents. Outcome measures will consider prolongation of the latent period and reduction in neonatal morbidity and hospitalization. First Year Cost: $1,000,000; Total Projected Cost: $3,500,000.

(4) Evaluation of Vitamin E in the Prevention of Intraventricular Hemorrhage in Very Low Birth Weight Infants. The multicentered Neonatal Intensive Care Network, consisting of seven large neonatal intensive care units, is planning a study to examine the safety and efficacy of using vitamin E in the prevention of intraventricular hemorrhage in very low birth weight infants. First Year Cost: $1,500,000; Total Projected Cost: $3,500,000.

(5) Intravenous Ig Globulin in the Prevention of Neonatal Infectious Morbidity in Very Low Birth Weight Infants. Very low birth weight infants are susceptible to a variety of infections during long stays in neonatal intensive care units. This study will evaluate the use of intravenous Ig Globulin in the prevention of these infections. First Year Cost: $500,000; Total Projected Cost: $1,250,000.

(6) Transdermal Patches for Female Contraception. Contraceptive drugs can be absorbed through the skin. A transdermal route of administration avoids some of the drug inactivation by the liver which occurs with oral administration. Consequently, lower amounts of the drugs can be used. First Year Cost: $250,000; Total Projected Cost: $500,000.

(7) Mental Retardation Research Centers (MRRCs) Network of Clinical Trials. The 12 MRRCs would form a network for collaborative clinical trials in the prevention or amelioration of mental retardation. First Year Cost: $1,200,000; Total Projected Cost: $6,000,000.

(8) Clinical Studies with New Injectables for Female Fertility Regulation. In collaboration with WHO the NICHD has developed several new, long-acting injectable preparations. They appear to have few undesirable toxic manifestations when tested in animals. WHO has initiated clinical studies in several countries and NICHD is planning to initiate studies in the U.S.A. First Year Cost: $200,000; Total Projected Cost: $750,000.

(9) Clinical Study of a New Testosterone Derivative for Male Fertility Regulation. NICHD is involved in the development and testing of two long-acting preparations that can be utilized in the development of male contraceptives and for the treatment of testosterone deficient men. One preparation involves microencapsulated testosterone which is being evaluated in hypogonadal men by intramural scientists. The other preparation, a long-acting derivative of testosterone, is undergoing toxicological evaluation. The need for these testosterone preparations stems from the fact that many approaches to male contraception will require testosterone supplementation. First Year Cost: $175,000; Total Projected Cost: $400,000.

(10) Clinical Studies with a New Generation of LHRH Antagonists for Male and Female Fertility Regulation. LHRH is a natural hormone that controls reproduction in both sexes. LHRH antagonists are synthetic copies that antagonize the action of LHRH. Studies are planned to assess the potential of these drugs for fertility regulation in both sexes. First Year Cost: $350,000; Total Projected Cost: $1,200,000.

(11) Clinical Studies with a Long-Acting Spermicidal Formulation. A long-acting (24 hr.) spermicidal formulation releasing nonoxynol has been prepared. Assuming that the initial studies are encouraging a clinical trial would be initiated in FY 1987. First Year Cost: $150,000; Total Projected Cost: $350,000.

(12) Induction of Ovulation in Postpartum Lactating Woman with Pulsatile, Intravenous Gonadotropin-Releasing Hormone. Ovulation is suppressed in lactating postpartum women. Initially this is associated with low levels of gonadotropins and high levels of prolactin (PRL) in plasma, suggesting a hypothalamic cause of anovulation similar to hyperprolactinemic amenorrhea. Later in the postpartum period, however, PRL falls and FSH rises, yet folliculogenesis is still suppressed; this suggests that other mechanisms may also be involved in lactational amenorrhea. To study this question, a uniform hypothalamic stimulus using pulsatile GnRH administered via a portable infusion pump will be used to compare the pituitary and ovarian responses in lactating and non-lactating women, in women with non-puerperal hyperprolactinemia due to a microadenoma, and in women with hypothalamic amenorrhea but normal prolactin levels. First Year Cost: $200,000; Total Projected Cost: $600,000.

(13) Dose-Response Relationship Between Thyroxine Dose and Lower Leg Growth Rate in Childhood Hypothyroidism. Thyroid hormone is essential for growth; however, the dose-response relationship between

thyroid hormone dose and growth rate is not known. The purpose of the study is to define this dose-response relationship in prepubertal children with primary hypothyroidism, through a randomized double blind study where children will receive two month courses of treatment with doses of thyroxine from 0-6 ug/kg/day. First Year Cost: $200,000; Total Projected Cost: $600,000.

(14) Nutrition, Other Factors, and the Outcome of Pregnancy. The project is identifying causal factors relating to pregnancy and poor pregnancy outcome among lower socioeconomic status inner city minority populations. The clinical trial that will result from this study will capitalize on this information and develop an intervention study to improve the pregnancy outcome in this group. First Year Cost: $150,000; Total Projected Cost: $600,000.

(15) Factors Influencing Breastfeeding. There is a need to analyze the causal factors of the low incidence of breastfeeding in certain populations in the U.S. and to develop intervention studies to improve both the incidence and duration of breastfeeding. This clinical trial is designed to address this critical problem. First Year Cost: $150,000; Total Projected Cost: $600,000.

RESEARCH ON DIABETIC RETINOPATHY

Question: Dr. Kupfer, I understand that at least 40 percent of all diabetics show some signs of diabetic retinopathy. What research efforts are underway for treating and eventually preventing this eye disease which can often result in blindness?

Answer: Determining the best way to employ laser treatment is one major focus of NEI-supported research on the ocular complications of diabetes. A decade ago, an NEI-supported clinical trial showed that laser treatment can dramatically reduce the risk of severe visual loss in people with advanced diabetic retinopathy. Now the NEI is supporting the Early Treatment Diabetic Retinopathy Study (ETDRS) to learn whether laser treatment might be more helpful if used at a relatively early stage of diabetic retinopathy. There are 4,000 patients and 21 participating clinics involved in this study, which is supported by research contracts. Already, the study has found that laser treatment can reduce the risk of visual loss in people with diabetic macular edema, a form of diabetic retinopathy which causes blurred vision. The study is continuing to follow these patients and to investigate the effect of early laser treatment on people who have diabetic retinopathy without macular edema. Also, the study will determine whether aspirin is of benefit in slowing or halting the progression of diabetic retinopathy.

In addition, the NEI is pursuing leads from basic research that may point to a new method of preventing the complications of diabetes. Several years ago, NEI scientists found that an enzyme called aldose reductase is involved in the development of the "sugar cataracts" that form in diabetic animals. They also found that inhibition of this enzyme can prevent the development of these cataracts. This discovery has led to the development of a new class of drugs called aldose reductase inhibitors, which show promise of preventing the eye, nerve and kidney complications associated with diabetes. The NEI is now collaborating with the pharmaceutical firm Pfizer, Inc., in a clinical trial of one of these drugs. The study,

called the Sorbinil Retinopathy Trial, will determine whether the drug sorbinil, an aldose reductase inhibitor, can prevent or slow the progression of eye and nerve complications of diabetes. The NEI is also supporting laboratory and clinical studies to better understand the effects of diabetes on the eye and to find new methods of controlling aldose reductase. In the latter studies, scientists are attempting to locate the genes that control aldose reductase production and find a means of interfering with their action. If these studies are successful, a patient's level of aldose reductase might be reduced without the necessity for daily doses of aldose reductase inhibiting drugs.

Question: Will the proposed budget cuts in FY87 and FY88 affect this research? If not, what other areas of research would have to absorb the cuts?

Answer: Grant-supported projects on diabetes would be affected under the proposed budget. However, diabetes research will continue to be a high priority.

BUDGET

Question: Does your budget request include out-year funds to level fund research project grants?

Answer: Yes, the budget request includes an advanced appropriation of $110,871,000 to fund future year commitments associated with competing research project grants awarded in FY 1988.

Question. What is your request without those funds?

Answer. The FY 1988 request minus the advanced appropriation is $184,829,000.

Question. How much is cut in FY87 as part of your FY88 request?

Answer. The FY 1988 budget request includes the extended availability of $15,191,000 from the FY 1987 appropriation.

Question. What was your original budget request for FY88?

Answer. NEI's FY 1988 request to NIH was $255,000,000.

CLINICAL TRIALS

Question: How many clinical trials will you fund in FY87?

Answer: NEI will fund twenty-six clinical trials in FY 1987.

Question. How many are ready to be funded in FY88?

Answer. Six clinical trials are ready to be initiated in FY 1988.

Question. How many will you fund under your current budget proposal?

Answer. Under the FY 1988 budget proposal, NEI will maintain twenty-six ongoing clinical trials.

Question. Specifically, which ones would not be funded?

Answer. The following clinical trials would not be funded under the FY 1988 budget request:

Assessment of Acyclovir and Other Antiviral Agents in the Treatment of Ocular Herpes Infections

Treatment of CMV Retinitis with Antiviral Drugs

Assessment of Anticlotting Agents in the Treatment of Retinal Vascular Occlusions

Assessment of Laser Treatment of Macular Edema in Central Vein Occlusion

Study of Effects of Various Types of Contact Lenses on the Cornea at the Cellular Level

Comparison of Early Versus Late Intraocular Surgery for Accident Victims Who Have Suffered Ocular Trauma

NIGMS BUDGET REQUEST FOR 1988

Question. Does your budget request include out-year funds to level fund research project grants?

Answer. Yes, the NIGMS budget request for 1988 of $873.5 million includes $391.5 million to cover the future year non-competing continuation costs of new and competing research project grants to be awarded in 1988.

Question. What is your request without those funds?

Answer. Without the $391.5 million for out-year costs, the NIGMS budget request for 1988 would be $526.8 million.

Question. How much is cut in FY87 as part of your FY88 request?

Answer. The NIGMS budget request for 1988 assumes a reduction of approximately $44.9 million from the $571.2 million provided for the Institute's research and research training programs in the 1987 appropriations bill. Under the President's budget request, these funds would be made available to the NIGMS in 1988 and, added to $482.0 million in requested new obligational authority, would provide a total of $526.8 million to the Institute, as noted above.

Question. What was your original budget request for FY 88?

Answer. NIGMS originally requested a budget of $666,102,000 for FY 1988.

IMPACT OF 1988 BUDGET ON NIGMS PROGRAMS

Question. Dr. Kirschstein, since the President's budget was sent to Congress in early January, I have been saying that we should not be cutting the funds for basic research to pay for more specific, targeted research efforts such as AIDS.

Your institute focuses on all fatets of basic biology and, I am sure, contributes a great deal to our advances and achievements in other areas. What kinds of research will not be funded if the President's FY88 budget was approved?

Answer. A substantial number of meritorious basic research studies in all of the areas supported by the Institute would go unfunded, including research on genetics, cellular and molecular biology, pharmacology, and structural biology. This would include work dealing with such topics as gene mapping, developmental genetics, the structure and function of important proteins and nucleic acids in both normal and diseased states, mechanisms of drug action, safer methods of drug delivery, and the development of artificial enzymes.

Question. What will be cut in FY87?

Answer. As noted above, under the President's revised budget for 1987, the NIGMS's research programs would be reduced $44.9 million below the appropriations bill level. This reduction would be handled partially through negotiated reductions of the order of 9-12 percent in the average size of the research project grants to be awarded by the Institute, and partially through a reduction in the number of new and competing awards to be funded. The 94 grant reduction would be distributed among Institute programs as follows: Genetics--41 grants; Cellular and Molecular Basis of Disease--27 grants; Biophysics and Physiological Sciences--20 grants; and Pharmacological Sciences--6 grants.

Question. What will be cut in FY88?

Answer. Under the President's budget request for 1988, which assumes the continued availability of $44.9 million appropriated in 1987, the NIGMS would be able to support 855 new and competing awards. This is less than the 981 new and competing awards funded in 1986, but represents an increase of 111 awards over the revised estimate for 1987, and an increase of 17 awards over the 1987 appropriations bill level. The President's budget would, however, require negotiated reductions below study section recommended levels of approximately 18 percent for noncompeting awards and 20 percent for competing awards. Without the continued availability of the 1987 funds, of course, there would be quite dramatic decreases in all NIGMS programs in 1988.

Question. What impact will these cuts have on other areas of science that rely on information from basic research?

Answer. It is the role of the NIGMS, in the division of labor established at NIH, to support basic non-disease targeted research that is designed to add to the armamentarium of knowledge, ideas, and research tools available to investigators supported by the various categorical institutes. The availability of recombinant DNA

technology, for example, which was the product of NIGMS-supported research, has stimulated the pace of research in virtually all areas of biomedical research. One illustration is the recent use of recombinant DNA techniques in the successful production by NIDDK grantees of a synthetic hormone (erythropoietin), the administration of which may eliminate the current need for frequent blood transfusions in patients undergoing kidney dialysis. The decrease of 41 research projects from the Institute's Genetics Program in 1987, therefore, as well as the proposed reductions in other Institute programs, will have the effect of slowing up research developments in a large number of areas.

CLINICAL TRIALS

Question. How many clinical trials will you fund in FY87? How many are ready to be funded in FY88? How many will you fund under your current budget proposal? Specifically, which ones would not be funded.

Answer. Because the mission of the NIGMS is to support biomedical research of a very basic nature, the Institute does not support any clinical trials.

1988 REQUEST FOR RESEARCH PROJECT GRANTS

Question. Does your budget request include out-year funds to level fund research project grants?

Answer. No it does not. The Division of Research Resources does not support any research project grants. As such, it was not included in the Administration's proposal for advanced appropriations to fund out-year commitments.

Question. What is your request without those funds?

Answer. Our request is the same with or without those funds -- $263,324,000.

Question. How much is cut in FY87 as part of your FY88 request?

Answer. Nothing has been cut from our 1987 budget as part of our 1988 request. Again, since DRR awards no research project grants, we were not included in the Administration's proposal for extended availability of funds for competing research project grants.

Question. What was your original budget request for FY88?

Answer. The original 1988 budget request for DRR was $263,324,000.

SUPERCOMPUTERS

Question. Dr. Pickett, is DRR helping to make high powered supercomputers available to biomedical researchers?

Answer. Yes, it is, through its Biomedical Research Technology (BRT) Program, the goals of which are to identify and

develop advanced technologies needed in biomedical research and to provide access to these technologies for use in biomedical research problems.

Question. If so, how are you making them available?

Answer. In FY 1986, the NIH and the National Science Foundation (NSF) announced a joint program designed to encourage the broadened use of supercomputers by biomedical, biological, behavioral, social and economic scientists. Investigators were invited to apply for up to 25 hours of supercomputer CPU time at one of the NSF supercomputer centers. As a result of this announcement, 20 NIH-supported investigators received CPU time at NSF supercomputer centers.

The potential for applying supercomputer technology to biomedical research problems was explored in an NSF-sponsored workshop on applications of supercomputers in life sciences held in December 1984. Over 100 scientists attended this workshop, many of whom are principal investigators on NIH grants. The participants agreed that there are important immediate applications in studies of macromolecular structure and dynamics, mathematical modeling of dynamic physiological systems, image processing, population biology, and data bases of several sorts. Copies of the proceedings of the workshop are available from the NSF. One recommendation to NSF from the participants was to stimulate cooperation between Federal funding agencies (notably NIH and NSF) in providing access to supercomputer facilities.

An NSF-sponsored three-week supercomputer training institute was attended by a number of biomedical scientists in the summer of 1986. The BRT Program provided support for these participants.

In FY 1987 the BRT Program will issue a three-year cooperative agreement award to a supercomputer facility to provide NIH-supported biomedical scientists access to supercomputer cycles and train these scientists in the use of supercomputers. A total of 12 applications have been received in response to our Request for Applications, 5 of which are from institutions that have some support from NSF. All of these efforts are being coordinated with the NSF and the National Cancer Institute.

ANIMAL FACILITIES IMPROVEMENT PROGRAM

Question. Dr. Pickett, in response to a request by Congress, the N.I.H. has submitted a report on current and long-term needs for facilities housing laboratory animals. The report concludes that "A large number of the institutions engaged in research involving laboratory animals need extensive restoration or new construction of laboratory animal facilities." What is the status of N.I.H.'s Laboratory Animal Facility Improvement Program?

Answer. In 1985, the Division of Research Resources initiated a new Animal Facilities Improvement Program to help institutions upgrade their animal facilities and develop centralized programs of animal care in support of their biomedical research programs. The grants enable institutions to comply with the Animal Welfare Act and the Public Health Service Policy of Humane Care and Use of Laboratory Animals. Improvement grants are normally made for one year, and

support such items as cages that meet current standards, sanitation equipment, and renovation of animal facilities. Each award is limited to $500,000 with a dollar for dollar matching requirement for awardee institutions. In 1985 DRR awarded 23 institutional improvement awards at a cost of $8.7 million. In 1986, 18 new awards were made at a cost of $3.8 million. A new request for applications was announced in July 1986 for FY 1987 competition. A total of 83 applications was received requesting more that $19.0 million.

Question. How much will N.I.H. spend on improving the conditions of animal facilities this year?

Answer. The Division of Research Resources has $9,981,000 available for the Animal Facilities Improvement Program in FY 1987. In addition, it has $3,500,000 in the Primate Research Centers Program for primate center renovations and improvements.

Question. How much are you requesting in FY88?

Answer. The FY 1988 budget request for DRR includes $9,981,000 for the Animal Facilities Improvement Program, the same level as in 1987. The FY 1988 request also includes $2,000,000 in the Primate Research Centers Program for primate center renovation and improvements.

OUT-YEAR FUNDS

Question. Does your budget request include out-year funds to level fund research project grants?

Answer. The budget request for NIEHS includes $41,447,000 to fund the entire project period of all competing research project grants awarded in FY 1988.

Question. What is your request without those funds?

Answer. The budget request for NIEHS excluding the out-year funds is $198,431,000.

Question. How much is cut in FY 1987 as part of your FY 1988 request?

Answer. The proposed reappropriation from FY 1987 to extend availability of funds through FY 1988 is $6,259,000.

INDUSTRIAL CHEMICALS

Question. Dr. Rall, what is the Environmental Health Sciences Institute doing to identify and minimize hazards of industrial chemicals?

Answer. There are three areas of activity at NIEHS which I would like to describe which are related to the hazards of industrial chemicals. First, we work rather closely with the Office of Toxic Substances in EPA to provide technical advice and assistance in their regulatory program for new chemicals which is authorized by the Toxic Substances Control Act. We serve on their Interagency Testing Committee to help nominate new chemicals for safety testing before they are permitted to be widely used in industrial processes. I also manage the National Toxicology Program in the Department of Health and

Human Services which coordinates the studies of the cancer causing properties of chemicals which are widely used and for which major opportunities for exposure exist in the United States. The majority of the chemicals tested by the National Toxicology Program are commonly used industrial chemicals. Secondly, our new research grants program implemented in response to the reauthorization of the Superfund is focused on the study of the health and ecological effects of uncontrolled hazardous waste. This basic research program is expected to grow significantly over the next four years and is designed to yield information which can be applied to the resolution of some of the most pressing problems regarding the disposal and diminution of the toxicity of the hazardous by-products of industrial processes. Finally, our mission at NIEHS is to conduct and support basic research into the health effects of environmental exposures. The results of our research are used not only by regulatory agencies to set health protection standards, guidelines, and action limits, but are also used by industry itself to take action to limit or prevent exposures in the work place and protect the citizens in nearby communities. We know that much work in the three areas I just outlined must be done before you can be sure that the hazards of chemicals produced, used, and disposed of by industry will not harm human health. But I think that the NIEHS effort in the area of basic research makes a valuable contribution to the solution of the overall problem.

CLINICAL TRIALS

Question. How many clinical trials will you fund in FY 1987?

Answer. NIEHS does not fund clinical trials in the usual sense. If one views a clinical trial as the penultimate step prior to wide public use and acceptance of a new treatment or vaccine, then our chronic study of a chemical in animals would be the equivalent step. Our role is to identify and characterize toxic agents and the chronic study is the final proof, if you will, of safety or harm.

Question. How many are ready to be funded in FY 1988?

Answer. We wil not fund any classic clinical trials in FY 1988, though we hope to make several awards for new, small clinical units to study environmental diseases in humans when resources become available.

Question. How many will you fund under your current budget proposal?

Answer. We would not make any of these awards under the President's FY 1988 proposal.

Question. Specifically, which ones would not be funded?

Answer. The process is not developed enough to give such specifics at this time.

1988 BUDGET REQUEST

Question. Does your budget request include out-year funds to level fund research project grants?

Answer. No, the President's FY 88 budget request for the National Library of Medicine's research grants--which are

supported primarily through our Medical Informatics program--does not include out-year funds for grant commitments.

Question. What is your request without those funds?

Answer. The President's budget request for NLM in FY 88 is $64,399,000. This level is unaffected by the proposal to advance fund grant commitments.

Question. How much is cut in FY 87 as part of your FY 88 request?

Answer. No funds are proposed to be cut from the NLM's FY 87 appropriation as part of the Administration's FY 88 budget request for the Library.

Question. What was your original budget request for FY 88?

Answer. The Library's original FY 88 budget request to NIH was approximately $84.9 million.

MEDICAL INFORMATICS

Question. What will you be able to do in 1988 to support universities in developing advanced information systems for medical uses? In FY 88, would your budget increase or decrease in this area?

Answer. The Library has a major extramural program called Medical Informatics which supports research and research training in the study of biomedical information, data, and knowledge--their storage retrieval, and optimal use for problem-solving and decision-making. I am pleased to say that this year, in FY 1987, we have been able to double our support for research training in medical informatics. In FY 1988 we will continue that level of training, but funding for investigator-initiated research grants will decrease by approximately $1 million, and we will be able to fund only those awards with commitments from previous years.

Question. Dr. Lindberg, you stated that, "Biotechnology is not only an area of great scientific importance, but it is an area that would benefit greatly by intensive application of automated information systems." Please explain how the National Library of Medicine can apply its expertise to this area.

Answer. Progress in biotechnology research has come remarkably fast in the last two to three years. Even knowing less than 1% of the human genome, researchers have already been able to produce synthetic growth hormone, insulin, interferon for cancer treatment, and have developed diagnostic tests for Huntington's disease, thalassemia, cystic fibrosis, and very important information about the genetic basis for some kinds of Alzheimer's disease. Progress in this field has been in the technical area of nucleic acid sequence determination as well as in the clinical sphere of applying this new information very rapidly to important health problems.

It is apparent, however, that obstacles to continued rapid progress in this field can be identified in four areas. First,

the rate at which new information is produced about such matters as nucleic acid sequencing is so rapid that the systems for acquiring the data and putting them into proper computer databanks have been far outpaced by research progress. Second, there is a lack of compatibility between the dozen or so important computer database systems in this area. That is, data cannot be transferred between the systems, and investigators cannot search the systems in a coordinated manner to understand the importance of the new data that are coming from the laboratories. Third, it is clear that one needs a permanent system for distribution of the information that is the result of public funding of research. Generally speaking, this information is being freely shared through the published literature in the finest tradition of science. However, the form of the discoveries is such that the printed scientific journals are not entirely suitable for this sharing. One needs a permanent and reliable central depository for the information, and means to distribute it and make it available to the individual laboratories where it will do the most good. Fourth, while many of these needs can be satisfied by intelligent application of existing computer technology and systems, the most complex questions and many of the questions that will be asked in the future require further research to create more sophisticated information systems.

NLM has experience in managing many different kinds of database information technologies and in helping to assemble databases that derive from many different sources. The toxicology information systems at NLM and the PDQ cancer information system are examples of this kind of work done in collaboration with other government agencies that have primary responsibility and expertise in these subject areas.

We are now working with NIGMS, DRR, and other NIH institutes to offer advice and a limited amount of help in order to make the creation of certain of the computer databases in biotechnology more efficient and to suggest ways to increase compatibility between them. In addition, we are enthusiastically working with biotechnology scientists at NIH and other researchers such as those funded by the Howard Hughes Medical Institute to contribute our expertise to the development of advanced systems that can benefit these groups of talented investigators.

Some examples of this work include the following:

- Lister Hill Center researchers are working with Library Operations staff to unify the terminology used by NLM's MEDLINE system with that used in the computer databases that contain nucleic acid protein products information.

- Lister Hill researchers have created an advanced system for building and accessing McKusick's Mendelian Inheritance in Man file. Essentially, this makes an invaluable textbook available as a computer database.

- Furthermore, the same system permits at least a small group of investigators at NIH to use the information in these databases in order to support advanced research. This is just the beginning, of course, but this system points the way to what might be possible in the way of

service to all relevant U.S. investigators in the future.

- Lastly, NLM, with the advice of NIH institutes with relevant missions, plans to produce with contract help in 1987 a Directory of Biotechnology Information Resources.

NATIONAL CENTER FOR BIOTECHNOLOGY INFORMATION

Question. How do you view the recently introduced legislation (H.R. 393) that will establish a National Center for Biotechnology Information at the National Library of Medicine?

Answer. On March 6, I testified before the Subcommittee on Health and Long Term Care of the House Select Committee on Aging regarding this bill, introduced by that Subcommittee's Chairman, Mr. Pepper. In my statement, I stated: "It is clear that there is much activity in the field of biotechnology information. What is not clear is whether this activity will remain fragmented and uncoordinated, or whether there will be a concerted effort to pull together the information resources necessary to make optimum progress in this exciting field."

My view is that H.R. 393 is a sound approach to developing a coordinated, focused national program for biotechnology information. I believe the National Library of Medicine--the world-wide focus for all biomedical information--is also the appropriate organization in which to establish a national center for biotechnology information.

BUDGET

Question. Does your budget request include out-year funds to level fund research project grants?

Answer. The FY 1988 budget request includes $8,733,000 for future year commitments associated with competing research project grants.

Question. What is your request without those funds?

Answer. The NCNR budget request without the out-year funds is $16,133,000.

Question. How much is cut in FY87 as part of your FY88 request?

Answer. The cut in FY 1987 of $1,465,000 is part of the FY 1988 request.

Question. What was your original budget request for FY88?

Answer. No FY 1988 budget request was prepared for the National Center for Nursing Research because it had not been authorized by Congress at the time the original submissions were being prepared.

AIDS

Dr. Merritt. Last year Congress appropriated $1.9 million for AIDS Education and Training Progams for Health Professionals.

Question. Have you been involved in developing any of these programs?

Answer. No, I have not been involved in developing these programs.

Question. Do you have any plans to assess the kinds of health care services AIDS patients need and how these services might best be provided?

Answer. Yes, we have currently issued a program announcement concerning the NCNR interest in funding all aspect of Nursing Research related to AIDS.

Questions Submitted by Senator Pete V. Domenici

NIH--MAGNETOENCEPHALOGRPAHY

Question. In the justifications accompanying the FY 1988 budget request for the National Institute of Neurological and Communicative Disorders and Stroke, the research applications of various brain scanning techniques are discussed. In that discussion, magnetoencepthalography, or MEG, is mentioned as being developed as a scanning technique in patients with partial epilepsy.

Is the MEG research you discuss that being developed at UCLA's Neuropsychiatric Institute under the direction of Dr. Daniel Freedman?

Answer. The NINCDS grant awarded to the UCLA Neuropsychiatric Institute (NPI) entitled, "Magnetoencephalography and Evoked Potentials in Epilepsy", is directed by Dr. William W. Sutherling of the Department of Neurology. Dr. Freedman is Executive Vice Chairman of the Department of Psychiatry at NPI.

Question. Can you summarize the thrust of current MEG research effort and what applications you have identified in your preliminary work with epileptic patients?

Answer. NINCDS scientists and grantees have demonstrated that measurement of magnetic fields produced by abnormal discharges in limited regions of the brain provides precise information concerning the location, depth, and orientation of an epileptic focus. This information serves as a guide to localizing the site for surgical control of medically intractable seizures.

In addition, Small Business Innovation Research Program grantees and contractors are developing more sophisticated instrumentation to measure these magnetic fields.

Question. Has NINCDS identified other clinical applications for the MEG technology at this stage of its research?

Answer. Initially, Institute projects have focused on epilepsy. However, MEG is also now being developed to study peripheral nerve function. Future clinical applications may include diagnosis of brain disorders such as tumors, trauma, stroke, or dementias.

NIH--SCHIZOPHRENIA RESEARCH

Question. In the report accompanying the FY 1987 Labor-HHS Appropriations bill, the Senate urged the National Institute of Neurological and Communicative Disorders and Stroke to develop research programs addressing schizophrenia and to jointly fund projects with the National Institute of Mental Health to pursue the possible organic causes of this serious disease.

Would you give this subcommittee your impression of the extent to which cooperation and collaboration is taking place between your institute and NIMH?

Answer. The two Institutes have a history of thirty-five years of cooperative interaction in the brain sciences. The intramural research programs of the Institutes have close linkages on the scientist to scientist level and there are several ongoing areas of scientific collaboration. Similarly the concurrent assignment of grants of interest to both Institutes has been accomplished over the years according to mutually agreed administrative guidelines which prevent redundancy and encourage coordination.

Basic neuroscientists apply the same fundamental skills and approaches when addressing research issues of brain development, structure, and/or function whether they work in mental health, neurological disorders or more generic neuroscience environments. NINCDS continues to support extensive research relevant to brain structure, function, and dysfunction. It is the progress in this neuroscience research which forms the basic springboard from which the expanding research initiatives in schizophrenia are being launched.

NINCDS scientists are included in the working panels for the NIMH development of a National Plan for Schizophrenia Research. We will consider additional areas of research relevant to schizophrenia on the basis of recommendations made by the working panels.

Question. What specific projects, if any, are currently being undertaken jointly?

Answer. The major activity relevant to schizophrenia which shares support between the two Institutes is in the Positron Emission Tomography (PET) area where several projects of NINCDS PET centers involve studies of schizophrenic subjects. These studies address issues of quantative measurement of cerebral metabolism in the brain of the schizophrenic subject.

Question. How much funding is being directed to these joint projects?

Answer. One of these projects is a notable research program

on regional brain function in psychiatric disorders at the University of Pennsylvania supported by NIMH for approximately $341,000 this year. It utilizes the extensive Positron Emission Tomography Center facility to which NINCDS presently provides over $2 million annually in grant support.

Similarly, another study on PET scanning in schizophrenia at Johns Hopkins University will receive some $395,000 in NIMH support this year utilizing the resources of the PET Center there which receives over $1,134,000 from NINCDS each year.

Question. If no joint projects have been started, how is the directive in the Senate report being complied with?

Answer. The NIMH has initiated an effort to develop a plan for expansion of research on schizophrenia. As these plans progress, extensive interaction with neuorscientists supported by NINCDS will occur and additional collaborative projects can be expected to develop.

Question. Does the NINCDS plan to begin schizophrenia research projects in association with NIMH in FY 1987?

Answer. We are awaiting development of the NIMH National Plan and the evaluation of responses to current NIMH Program Announcements and Requests for Applications recently published to identify additional opportunities for closer collaboration.

BUDGET REFORM

Question. Calls for budget reform are increasingly heard as budget deadlines are too often missed, important budget decisions are delayed, appropriation bills and other direct spending legislation are held up in committee, and omnibus spending bills take the place of timely and orderly consideration of individual bills. One procedural reform that is being considered is the two-year budget cycle where budget and appropriations matters would be considered in the first year, and authorizations and oversight would be undertaken in the second year. Would your Department favor a biennial budget process? What benefits would your Department achieve in a two-year appropriation cycle?

Answer. We definitely favor a biennial budget process. This year we have requested two-year appropriations for the following accounts:

- o St. Elizabeths Hospital
- o Retirement Pay and Medical Benefits for Commissioned Officers
- o Grants to States for Medicaid
- o Payments to Health Care Trust Funds
- o Supplemental Security Income
- o Special Benefits for Disabled Coal Miners
- o Payments to Social Security Trust Funds
- o Family Support Payments to States

In addition, we have also included in our FY 1988 budget a request for advanced appropriations for the National Institutes of Health to fund outyear commitments generated by the award of

FY 1988 competing research project grants. This would reduce the grantee's annual uncertainties over the availability of funding for noncompeting awards because funds would then be available for the total project period of a research project grant at the time it is awarded. This should also permit better fiscal planning and grants management.

Two major benefits to be obtained from a two-year appropriation cycle would be:

- o the considerable savings in staff hours expended in budget preparation, hearings, reviews, etc.; and
- o the absence of the end-of-year continuing resolution problem in the first year of the two-year cycle.

Question. Approximately what proportion of your annual appropriation request would you consider simply repetitious of the previous year's submission?

Answer. Except for the changing considerations of each Administration, the legislative proposals that evolve, and the changing economic assumptions, the budgets are quite repetitious. It is our estimate that 75 percent of the data contained in each annual budget submission is duplicative from year to year.

Question. What difficulties can you foresee in preparing and submitting a two-year budget to the Congress?

Answer. We did not encounter any major difficulties in developing the budgets for those accounts that were targetted for the two-year appropriation process this year. We would hope that this two-year process would be extended to all our accounts. The process would be rather simple because we currently prepare outyear estimates for all our accounts. The major problem in two-year budgeting in the current environment is the Federal deficit and the Gramm-Rudman deficit target. If larger deficits than forecasted were to occur during the first year of the two-year budget cycle, it would most likely be necessary to revise the budget for the second year through a supplemental appropriation action.

ADDITIONAL SUBMITTED MATERIAL

[CLERK'S NOTE.—After the hearing, the following correspondence was received for inclusion in the hearing record:]

LETTERS FROM SENATORS ROBERT T. STAFFORD, JOHN H. CHAFEE, DAVE DURENBERGER, QUENTIN N. BURDICK, GEORGE MITCHELL, AND MAX BAUCUS

March 19, 1987

Senator Lawton Chiles, Chairman
Subcommittee on Labor, Health and Human Services, and Education
Committee on Appropriations
Room 186
Dirksen Senate Office Building
Washington, D.C. 20510

Dear Colleague:

We are writing to request your assistance in our evaluations of the adequacy of Federal agency efforts and funding levels to address the following environmental problems: the greenhouse effect, global climate change, and stratospheric ozone depletion.

As you may be aware, the Committee on Environment and Public Works has held a number of hearings on these issues. Testimony given at these hearings, and elsewhere, has caused us great concern over the prospect of unprecedented changes in global climate, as well as other environmental changes, and the implications of these changes.

There is broad scientific consensus that we are actively changing the composition of our atmosphere. Concentrations of carbon dioxide and other gases, including chloroflourocarbons, are increasing in the atmosphere as a result of man's activities. As a consequence, scientists predict unparalleled global warming and depletion of the Earth's protective stratospheric ozone layer. The implications include sea level rise, changes in rainfall patterns and agricultural regions, and increased incidence of skin cancer.

In order to assess the adequacy of Federal agency efforts to understand and respond to these problems, we have requested detailed information from various federal agencies on their programs relating to the greenhouse effect, global climatic change, and stratospheric ozone depletion. Attached is a copy of the letter we sent to the Department of Health and Human Services.

To insure a timely response to our inquiry, and to have a written record of agency responses, we would appreciate it if you would submit these questions on our behalf during the Appropriations Committee hearing process and include the questions, as well as agency responses, in the Committee hearing record.

Thank you for your help in this matter.

Sincerely,

Robert T. Stafford

Quentin N. Burdick

John H. Chafee

George Mitchell

Dave Durenberger

Max Baucus

February 20, 1987

Honorable Otis R. Bowen
Secretary
Department of Health and Human Services
200 Independence Avenue, S.W.
Washington, DC 20201

Dear Mr. Secretary:

By this letter we request the submission of information, not later than March 6, 1987, regarding your agency's activities in addressing the environmental problems of the greenhouse effect, global climate change, and stratospheric ozone depletion.

The Senate Environment and Public Works Committee has held a number of hearings on the greenhouse effect, global climate change, and stratospheric ozone depletion. Testimony given at these hearings has shown that we are already committed to an unprecedented increase in surface temperature over the next few decades, with possible effects including a rise in global sea level, changes in ocean circulation, and changes in precipitation patterns.

We are deeply concerned by the prospect of such major and unparalleled changes in the composition of the atmosphere, and the implications for global climatic and environmental change. We are requesting information regarding your agency's efforts in these areas to assist us in understanding the existing and anticipated programs already addressing these issues. Specifically we would appreciate your responses to the attached questions.

We have forwarded a copy of this letter to the Chairman of the Appropriations Committee, and have requested that he incorporate these questions and your responses in the record of the budget hearings for FY88.

We look forward to receiving your response no later than March 6, 1987. If you have questions, please feel free to call Kate Kimball, Ron Cooper, Steve Shimberg, or Curtis Moore. They may be reached through the Committee on Environment and Public Works at 224-6176.

Thank you for your support in working with us on these important environmental issues.

Sincerely,

Robert T. Stafford

Quentin N. Burdick

John H. Chafee

George J. Mitchell

Dave Durenberger

Max Baucus

1. Please describe each of your program(s) which directly or indirectly involve or support work on (a) the greenhouse effect, (b) climate change, and (c) stratospheric ozone depletion, including:
   (a) basic research efforts
   (b) effects on human health, biota, etc.
   (c) studies of policy options for avoiding, minimizing, or coping with predicted changes, including use of alternative fuels and substitute chemicals and conservation.
   (d) international programs

2. Please indicate your current agency priorities and where, among these priorities, the problems of the greenhouse effect, global climate change, and stratospheric ozone depletion appear.

3. Does your agency have a major thrust or focus with respect to greenhouse, climate change, and stratospheric ozone issues? What are the priorities within your greenhouse, climate change, and stratospheric ozone programs? Are these multi-year efforts? When do you anticipate completing each of these projects?

4. The scientific evidence demonstrates that we are already committed to a 2°C increase in global average temperature, and that the effects of global warming may be manifested as early as the next several decades. How have these findings been factored into your planning? How does the magnitude and timing of these changes affect your projects?

5. Please provide a detailed accounting on the following, including a breakdown by specific offices/laboratories and projects for each fiscal year.
   (A) For the greenhouse effect
      (1) Expenditures in FY86.
      (2) Appropriations and expected expenditures in FY87.
      (3) Budget request in FY88.
   (B) For climate change
      (1) Expenditures in FY86.
      (2) Appropriations and expected expenditures in FY87.
      (3) Budget request in FY88.
   (C) For stratospheric ozone depletion
      (1) Expenditures in FY86.
      (2) Appropriations and expected expenditures in FY87.
      (3) Budget request in FY88.

6. Please describe how your agency's efforts are coordinated with those of other federal agencies and the scientific community.

7. What do you see as the five highest priority research needs in the area of greenhouse effect, global climate change, and stratospheric ozone depletion?

LETTER FROM OTIS R. BOWEN, SECRETARY, DEPARTMENT OF HEALTH AND HUMAN SERVICES

The Honorable Quentin N. Burdick
Chairman
Committee on Environment and Public Works
United States Senate
Washington, D.C. 20510

APR 28 1987

Dear Mr. Chairman:

I am responding to your letter of February 20 regarding activities of the Department of Health and Human Services (HHS) "addressing the environmental problems of the greenhouse effect, global climate change, and stratospheric ozone depletion." I regret that our Department was unable to respond to your inquiry by March 6 as you requested. As you may know, members of my staff have contacted Ms. Jennifer Hess of your staff to clarify the scope of your inquiry and to notify her that we would need additional time to assemble the required materials.

A review of programs of HHS components indicates that no activities are currently supported that relate specifically to the environmental problems of the greenhouse effect and global climate change. However, a number of components of the National Institutes of Health (NIH) are currently conducting and/or supporting research relevant to stratospheric ozone depletion, specifically the biological effects of exposure to ultraviolet (UV) radiation.

Projects and/or subprojects related to the biological effects of UV radiation are funded through intramural studies and extramural support of investigators at research institutions nationwide. Funding is contributed by the National Cancer Institute (NCI), National Eye Institute (NEI), National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), National Institute of Environmental Health Sciences (NIEHS), and the Division of Research Resources (DRR), NIH. A summary of NIH activities relevant to the questions you raised is enclosed.

I hope the overview as presented is helpful to you and the members of the Committee as you continue your review of our changing environment. A similar response has been sent to each of your colleagues who signed the February 20 letter.

Sincerely,

Otis R. Bowen

Secretary

Enclosure

ATTACHMENT

Question 1: Please describe each of your program(s) which directly or indirectly involve or support work on (c) stratospheric ozone depletion, including:
(a) basic research efforts
(b) effects on human health.

Response 1: As mentioned in the cover letter, a number of NIH entities are conducting and/or supporting research on the effects of exposure to UV radiation. Specific activities by Bureau, Institute, or Division (BID) are as follows:

National Cancer Institute (NCI)

The NCI supports intramural and extramural programs relevant to stratospheric ozone depletion, particularly with regard to the biological effects of exposure to UV radiation. UV-B (280-315 nm) and, to a lesser extent UV-A (315-400 nm) radiation have been demonstrated to be biologically active. The programs supported and performed by NCI on UV-B or UV-A radiation include basic laboratory research, clinical studies and epidemiologic investigations. Some of the significant findings resulting from epidemiologic research on the health effects of UV include evidence that intraocular melanoma is related to sunlight exposure, quantification of the risk of melanoma in melanoma-prone families, and development of age-, race- and sex-specific relative risk estimates for skin cancer as a function of intensity of UV-B exposure. A UV monitoring system has been developed which now includes 20 locations within the United States; this system will make it possible to obtain even more accurate correlations between the incidence of skin cancer and UV exposure. Other research in progress includes studies on UV-induced DNA damage and its repair and the identification and cloning of UV-inducible genes. Highlights of some research activities are as follows:

- Many projects are in progress to obtain information on UV-induced DNA damage and its repair in systems ranging from the cellular slime mold Dictyostelium discoideum, to yeast (Saccharomyces cerevisiae) and bacteria (E. coli), to human (normal and xeroderma pigmentosum) cells. Most such studies focus on the cellular response to UV exposure and represent attempts to characterize the molecular mechanisms and genetic control of cellular repair of UV-induced DNA lesions. There is particular interest in the biochemical reactions that give rise to mutations during replication of damaged DNA templates in a phage of E. coli because this rather simple system should yield information on mechanisms of mutagenesis that may be very significant to induction of carcinogenesis in mammalian cells.

- An in vitro assay has been developed to measure the effects of UV-A-mediated psoralen-DNA binding in human lymphoid cells. Recent results indicate that low doses of psoralen plus UV-A received by the leukocytes of psoriasis patients treated with this regimen exhibit decreased DNA synthesis along with decreased survival and induction of DNA interstrand cross-links.

- Changes in expression and genomic arrangement of known oncogenes in cultured cells transformed to malignancy by exposure to UV radiation are being analyzed. This approach may provide a strategy for evaluating the role of UV-induced activation of genes in neoplastic transformation.

- Carotenoid pigments have been shown to possess anticarcinogenic activity in a system employing exposure to UV-B as an initiating influence and treatment with 12-O-tetradecanoyl-phorbol-13-acetate (TPA) as the promoter. Mechanistic studies of the carotenoids are underway which are specifically designed to determine whether carotenoids have effects on the initiation or the promotion stage of carcinogenesis. Carotenoids have low toxicity and are readily available; thus they have the potential of being useful in the prevention and/or control of cancer.

- Analysis of a case-control study of intraocular melanoma has demonstrated a pattern of differences between cases and controls which provides the first solid evidence that this tumor is related to sunlight exposure. Persons born in the southern United States were at 3.1 times greater risk of intraocular melanoma than persons born in more northern latitudes. Regular use of hats, visors and sunglasses protected against this cancer.

- Clinical and laboratory studies of melanoma-prone families are continuing to clarify mechanisms of susceptibility to this familial cancer. A full color atlas depicting the clinical spectrum of dysplastic nevi (a type of mole) has been published recently. In addition the risk of melanoma in members of melanoma-prone families has been quantified; the cumulative lifetime risk of melanoma approaches 100 percent in family members with dysplastic nevi. Laboratory work has demonstrated that individuals in

melanoma-prone families exhibit a hypermutable state in response to UV exposure.

- Epidemiologic studies on the etiology of skin cancer, including malignant melanoma, are measuring the association of disease incidence and mortality with nonionizing solar radiation exposure. Age-, race-, and sex-specific relative risk estimates were derived for select geographic areas which vary greatly in the degree of intensity of UV-B exposure. Highest relative risks were found for Caucasians who had been treated for moles, followed by an excess risk for individuals with histories of exposure to ionizing radiation, coal tar or pitch, arsenic or those with acne psoriasis or warts, or those with outdoor jobs. Fair skin complexion, freckling, inability to tan, and Irish/Scottish ancestry were factors also found to be associated with high risk for skin cancer. Mathematical modeling indicates that the effect of UV-B is significant for skin cancer even after adjusting for demographic, host and other environmental factors.

- A network for measuring biologically effective amounts of nonionizing solar UV radiation began in the mid 1970s when Robertson-Berger (R-B) meters were developed in response to requests from various Federal agencies concerned with the problem of stratospheric ozone depletion. Results from the R-B meters have since been used to describe and develop patterns of association between skin cancer incidence and UV exposure in various geographic areas of the United States. Initially, measurements of UV-B data were collected and reported for the calendar year 1974. Of ten geographic areas in the United States which were included, however, only four had useful epidemiological data available for comparison. Surveys of skin cancer have since been conducted in an additional eight locations, and the National Oceanic and Atmospheric Administration has now included 18 U.S. locations in their UV-B monitoring system. The chief concern is with respect to the varying amounts and quality of UV-B information at several locations where skin cancer surveys were conducted. The UV monitoring system which has now been developed includes 20 locations within the U.S. This expansion of the monitoring network will enable workers to directly correlate the incidence of skin cancer and melanoma with accurate estimates of UV exposure data.

National Institute of Environmental Health Sciences (NIEHS)

Depletion of the stratospheric ozone layer is of concern to the NIEHS particularly as it relates to the health risks associated with the effects of UV radiation. Relevant research supported by NIEHS addresses radiation-induced DNA damage and the molecular mechanisms of repair. Scientists are increasingly aware of the importance of DNA damage and its role in carcinogenesis. Recent discoveries suggest that human cancers may result from the conversion of a normal gene (proto-oncogene) to a cancer-causing oncogene as a possible first step in the formation of a tumor. It is believed that DNA repair processes may prevent tumor formation through the repair of damage-induced lesions on the DNA, or alternatively that the DNA repair pathways themselves are integral in the conversion to carcinogenesis. Therefore, the elucidation of DNA damage produced by UV radiation and the mechansism by which these damages are repaired may have broad implications in mutagenesis and carcinogenesis.

National Eye Institute (NEI)

The NEI is currently supporting 20 extramural research projects related to the effects of various forms of radiation on ocular tissues. Several of these projects are designed to elucidate the biochemical and anatomical effects of UV and near-UV radiation, including that from sunlight, on structural proteins, enzymes, carbohydrates, and epithelial cell DNA of the lens and cornea. Changes in the lens proteins induced by UV radiation have been linked to the development of senile cataract in humans.

Because under normal conditions, the human lens is exposed to a vast spectrum of radiant energy, including UV light in sunlight and man-made radiation from

x-ray apparatuses, UV lamps, or various microwave sources, the NEI in 1984 began supporting a study on long-term sunlight exposure. This study is especially investigating UV light and the eye changes that occur in fishermen on the Chesapeake Bay with aging--in particular, senile cataract, lens opacities, and senile macular degeneration. Scientists working on this study have developed a sophisticated scheme to monitor the UV light exposure of the eyes of the fishermen under a variety of conditions. The changes in their eyes have correlated well with the degree of actinic elastosis (changes in the elastic tissue in the skin due to repeated exposure to sunlight) as measured on dermatologic examination. The principal investigators of this study have also developed methodologies for grading photographs of cataracts.

Because long-wave UV light is known to cause damage to the lens and retina, attempts are being made in cell cultures to evaluate the efficacy of two potent antioxidants, vitamin E and centrophenoxine, in preventing oxidation of lens tissues caused by exposure to long-wave UV light. The combined antioxidants have appeared to be effective protective agents. Further NEI-supported investigations are expected in this area of research.

National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK)

The NIDDK currently supports extramurally one project that is peripherally related to the effects of UV radiation, specifically on the organic photochemistry of organic atmospheric contaminants. Research findings from this project may lead to a better understanding of the overall problem.

Division of Research Resources (DRR)

DRR strengthens and enhances the research environments of institutions engaged in health-related research by developing and supporting a wide variety of essential research resources. These multidisciplinary resources are utilized by investigators conducting a broad spectrum of health-related research, including research on the effects of ultraviolet radiation. In 1986, these efforts included 10 subprojects on 9 grants and ranged from studies of sunscreen use by mothers of young children to the mechanism of interaction of ultraviolet radiation with cellular DNA.

Question 2: Please indicate your current agency priorities and where, among these priorities, the problems of stratospheric ozone depletion appear.

Response 2: Programs sponsored by NIH encompass the entire spectrum of human disease and have led to numerous achievements in diagnosis, treatment, prevention, and understanding of the physiologic processes underlying disease states. The scope of the research transcends specific Institute boundaries to include research in molecular biology, structural biology, genetics, immunolgy, neurobiolgy, and endocrinology. Also included are two specific research initiatives, one on AIDS, and the other on a relatively recent topic, space medicine, both of which incorporate the work of a number of Institutes. The NIH is committed to conducting and/or supporting research on diseases that afflict humans as well as on factors which may contribute to the development of disease conditions. Although the ozone layer in the stratosphere absorbs UV light and acts as a natural shield, technological activity could possibly decrease the effectiveness of the ozone shield. In view of this possibility, the NIH will continue to perform and/or support studies on the health effects of exposure to UV radiation.

Question 3: Does your agency have a major thrust or focus with respect to stratospheric ozone issues? What are the priorities within your stratospheric ozone programs? Are these multiyear efforts? When do you anticipate completing each of these projects?

Response 3: Stratospheric ozone issues are not a major thrust of the NIH. However, as noted above, NIH entities will continue to support basic research, clinical studies and epidemiologic investigations of the health effects of UV radiation. The basic research efforts will include studies on the mechanisms involved in UV-induced DNA damage and the DNA repair processes that follow UV

exposure; studies of the mechanisms of UV light sensitivity and damage to cells and the biochemical or cellular effects associated with exposure to UV light will also be emphasized. The clinical and epidemiologic studies will focus on risk factors for malignant melanoma and intraocular melanoma, the relationship between UV exposure and an autosomal dominant condition known as the nevoid basal cell carcinoma syndrome, and intervention trials attempting to lower the risk for UV-induced skin cancer with beta-carotene. In addition, support for additional studies of the effects of UV radiation on tissues of the lens, cornea, and the retina is expected to continue.

Question 4: The scientific evidence demonstrates that we are already committed to a 2°C increase in global average temperature, and that the effects of global warming may be manifested as early as the next several decades. How have these findings been factored into your planning? How does the magnitude and timing of these changes affect your projects?

Response 4: The conduct or support of research related to global climate change is not within the purview of HHS agencies.

Question 5: Please provide a detailed accounting on the following, including a breakdown by specific offices/laboratories and projects for each fiscal year:
(c) for stratospheric ozone depletion
(1) Expenditures in FY 1986
(2) Appropriations and expected expenditures in FY 1987
(3) Budget request in FY 1988.

Response 5:

(1) Estimates of support for research on the effects of exposure to UV radiation in FY 1986 are $5,600,400 (NCI); $3,000,000 (NEI); $606,000 (NIEHS); $128,300 (NIDDK); and $64,600 (DRR).

(2) Estimates of support in FY 1987 are $6,103,500 (NCI); $3,000,000 (NEI); $631,000 (NIEHS); $139,000 (NIDDK); and $67,000 (DRR).

(3) Although no specific budget request was made for support of research in this area in FY 1988, it is anticipated that funds will be made available from dollars appropriated to NIH Institutes for research project grants and/or intramural research.

Question 6: Please describe how your agency's efforts are coordinated with those of other Federal agencies and the scientific community.

Response 6: The Committee to Coordinate Environmental Health and Related Programs (CCEHRP) is the primary means within the Department of Health and Human Services for information coordination on all environmentally related issues.

HHS's efforts are coordinated with those of other Federal agencies and the scientific community in several additional ways. Various HHS components, principally the NIH and the Centers for Disease Control (CDC), maintain collaborative programs with the Environmental Protection Agency (EPA) in the area of environmental and occupational carcinogenesis. HHS staff also participate as members of the Interagency Testing Committee organized to evaluate chemicals covered by the Toxic Substances Control Act and serve as members of the Task Force on Environmental Cancer and Heart and Lung Disease. HHS staff also serve on the Task Force Planning Group which reviews and plans the activities of the working group meetings including preparation of annual reports for Congress. The Clean Air Act Amendments of 1977 (P.L. 95-95) mandate the Task Force to determine and quantify the relationship between environmental pollution and human cancer and heart and lung disease and to recommend research, strategies, and other measures to reduce or eliminate the risk of these diseases and prevent or reduce their incidence.

The Interagency Collaborative Group on Environmental Carcinogenesis, known as the ICGEC, was organized in 1973 for the purpose of establishing an information exchange program in the area of environmental cancer. Although the ICGEC began as a group of 10 Federal agencies, today it consists of approximately 28 agencies or subagencies who are participating in the mutual stimulation, dissemination and exchange of information which has been utilized in developing programs/projects in the respective agencies. Furthermore, the ICGEC has encouraged cooperation and collaboration of the member agencies with each other.

Question 7: What do you see as the five highest priority research needs in the area of stratospheric ozone depletion?

Response 7: In the area of stratospheric ozone depletion, only the NCI has prioritized its research needs as they relate to the effects of exposure to UV radiation. These are as follows:

a. Development of chemoprevention strategies for UV-induced cancer and identification of improved sunscreens.

b. Mechanism of UV-induced DNA lesions.

c. Mechanism of repair of UV-induced DNA damage and development of methods to enhance rate and efficiency of repair process.

d. Development of screening methods to identify individuals with genetically determined hypersensitivity to UV radiation.

e. Relationship between thickness of ozone layer and UV radiation exposure.

SUBCOMMITTEE RECESS

Senator CHILES. The subcommittee will stand in recess until 9:30 tomorrow morning, when we will hear from the Secretary of Health and Human Services in SD-116.

[Whereupon, at 4 p.m., Wednesday, March 11, the subcommittee was recessed, to reconvene at 9:30 a.m., Thursday, March 12.]

DEPARTMENTS OF LABOR, HEALTH AND HUMAN SERVICES, AND EDUCATION AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1988

THURSDAY, MARCH 12, 1987

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 9:30 a.m., in room SD–116, Dirksen Senate Office Building, Hon. Lawton Chiles (chairman) presiding.

Present: Senators Chiles, Proxmire, Harkin, and Weicker.

DEPARTMENT OF HEALTH AND HUMAN SERVICES

OFFICE OF THE SECRETARY

STATEMENT OF HON. OTIS R. BOWEN, SECRETARY OF HEALTH AND HUMAN SERVICES

ACCOMPANIED BY:
THOMAS BURKE, CHIEF OF STAFF
S. ANTHONY McCANN, ASSISTANT SECRETARY FOR MANAGEMENT AND BUDGET
RONALD DOCKSAI, ASSISTANT SECRETARY FOR LEGISLATION

OPENING REMARKS

Senator CHILES. Good morning.

The subcommittee this morning will hear testimony from Secretary Bowen in support of the 1988 budget request for the Department of Health and Human Services. In order to accommodate the Secretary's schedule we are hearing his testimony last after we have heard the testimony of all the administrative agency heads and after the testimony of the Assistant Secretary of Health.

SUBCOMMITTEE CONCERN

Secretary Bowen, I am sure that your troops have reported back to you the concerns that we have been expressing in the process of these hearings. To refresh your memory and our memories and help set the stage for your testimony, I will generally highlight our hearings to date for you.

80-149 O - 87 - 19

The proposal to request no new 1988 drug treatment funds and the proposal to begin the phaseout of the Protection and Advocacy Program for the mentally ill has not been too well received by the committee. Cutting funds for the immunization program and health service professionals was also not well received. The proposal to continue the slowdown in Medicare payments was not well received and the claim that this proposal has no impact on beneficiaries and providers is refuted by the 100 plus complaints that I get each week on this matter.

The committee was not well convinced that we can make another cut of 6,000 personnel at the Social Security Administration and not affect service delivery. The committee has reviewed at some length with Commissioner Hardy the very poor record of computer modernization at the Social Security Administration. We hope you will also lend some attention to this problem.

We have not been persuaded on the request to adopt generic appropriations in the Human Development Services programs and thereby yield congressional prerogatives over 26 separate programs. The Family Support Administration, created to highlight this administration's concern for the family, presented the committee with a proposal to cut or eliminate every discretionary program in its jurisdiction. Little support is in evidence for these proposals.

And finally, the proposal to carry forward $334 million of the 1987 NIH biomedical funding into 1988 is on the terminally ill list kept alive only by our lack so far of a vehicle upon which to kill it. On a more positive note, Mr. Secretary, the committee has been well pleased by the very thorough and thoughtful approach the Department has displayed and the fine leadership the Department has provided for the war on AIDS.

Mr. Secretary, by appearing last you will have the last word. In the courtroom this is called the final arguments, and the Department has a very able person indeed to present those. In some instances I said the committee, and maybe I should have spoken more for myself. Senator Weicker speaks very ably for himself and he shall in his statement. I think most of these things we are in agreement on but I do not want to say that we have sat down and discussed it.

SUBCOMMITTEE POSITION

Senator WEICKER. I think the chairman has eloquently articulated not just his position but mine, and indeed so much so that I am going to submit my prepared statement for the record because it pretty much tracks what he said, so I am just going to make a few impromptu remarks.

First of all, I am a great admirer of yours, Mr. Secretary. I think you are a very decent person. However, a budget is probably the most unerring statement of what it is that we do or what it is that we do not do. All the rhetoric in the world, the good actors, the bad actors, all this falls aside by a careful look at the budget. It does not permit itself philosophy. It does not permit itself partisanship. It does not permit it-

self a personality, good or bad. The figures are there. You are either doing it or you are not doing it. And when I take a look at the budget it belies the decency and, I might add in your case the expertise of the Secretary.

You came up with a plan, for example, for catastrophic health insurance which I think in one form or another all of us backed, and it took a lot of courage on your part, a lot of work on your part to have that as administration policy. The difficulty I find, however, is when I know that we are spending $2,000 a year per person on health care costs and yet we are spending $25 per person a year in research, and I say to myself at that juncture it seems to me that even if you double $25 to $50 it would not only cut down those health care costs, it would certainly have an enormous impact on what we are going to have to pay for whatever catastrophic health insurance plan is passed, and the fact that there will not be *x* number of catastrophic illnesses.

Now, what makes it especially difficult is to have somebody like yourself with both the expertise and the decency appear here and have to defend, and I might add the same holds true for my friends from NIH, to come before this committee in effect to present a budget that in the main was not devised by you, but rather was devised by the Office of Management and Budget where admittedly nobody has any expertise in either science or medicine or anything of that nature. It is a great ploy, and it is a pretty smart move, I suppose, as far as the administration is concerned. But it is not going to suffice as far as national policy by the time the Congress is through. So again I, like the chairman, have a great affection for the Secretary. I mean that. But I have no affection for the budget presented by this administration in the areas under your authority, whether it is for old people, for young people, or for the various ailments that present themselves and will present themselves later before this committee.

I have got to look them in the eye, and I could not if I agreed to this budget, and I will not. Thank you.

PREPARED STATEMENT

Thank you, Mr. Chairman.

I have a prepared statement which I will submit for the record.

[The statement follows:]

STATEMENT OF SENATOR LOWELL P. WEICKER, JR.

Good morning Mr. Secretary. I welcome you here before the subcommittee to testify on behalf of the fiscal year 1988 budget request for the Department of Health and Human Services. I know there is no question of your commitment to the programs included in this budget and to the people they serve. You have demonstrated a valiant effort in trying to secure funds for existing programs as well as for new proposals such as your plan for catastrophic care. I commend you for your efforts and I assure you of my support in fighting to adequately fund some of our most vital programs.

But Mr. Secretary, the budget proposal before us today just is not good enough. It will not be good enough for Congress and it certainly is not good enough for the people it is intended to serve.

This budget would cut the funds for biomedical research in 1987 and 1988 well below the level Congress appropriated and the President signed into law just last year. A lot of attention has been given to catastrophic health coverage but very little has been said about the massive cuts the President is proposing in biomedical research. Let me say it one more time. There is no money to be saved by cutting biomedical research. These cuts will only result in an increase in health care costs today and in the outyears. This country spends $2,000 per person each year in health care costs. Yet, we only spend $25 per person each year on biomedical research. If you doubled the research figure, I am sure we could cut the health care cost in half.

By the year 2020, there will be approximately twice as many people in this country over the age of 65 as there are today. There will be twice as many over 85 by the year 2000. And how does the President and his budget prepare for such predictable statistics? He cuts the funding for the National Institute on Aging. He eliminates the increases Congress provided last year for other aging programs. And the $10 million program designed to train health professionals in geriatrics is cut to $4.2 million. This is less than what Congress appropriated in 1986.

This budget doesn't just cut programs for older Americans. It cuts programs for our children, programs to protect the rights of the mentally ill, and it cuts programs that serve the poorest in our society.

No, Mr. Secretary, I support your efforts on catastrophic care and increases requested to combat the AIDS epidemic, but I will not support a budget that reneges on our overall commitment to the American people and our health and human service programs.

INTRODUCTION OF ASSOCIATES

Senator CHILES. Mr. Secretary.

Secretary BOWEN. Thank you both for your comments. I am pleased to have the opportunity to testify before you today on the fiscal year 1988 budget for our Department.

With me this morning is the Assistant Secretary for Management and Budget, Mr. S. Anthony McCann, and on my right is Mr. Tom Burke, the Chief of Staff, and Dr. Ronald Docksai, the Assistant Secretary for Legislation.

PREPARED STATEMENT

As you requested, I have already submitted for the record a detailed statement, and I would like now to try to summarize and share with you some of my thoughts on the issues and the challenges that it poses.

[The statement follows:]

STATEMENT OF OTIS R. BOWEN

Mr. Chairman and Members of the Committee:

I am here today to present to you the fiscal year 1988 budget for the Department of Health and Human Services.

This budget is a plan which maintains our national commitments in health, income support and social services, while it continues our progress toward government that will work better for all of us -- beneficiary, service provider, and tax payer alike.

This plan establishes clear priorities for health and human services that include:

- Protecting Social Security and Supplemental Security Income benefits by providing a cost-of-living adjustment estimated at 3.5 percent in January 1988.

- Increasing competition and efficiency in the health care industry by expanding private health plan options available to Medicare beneficiaries including employer-based plans.

- Improving health care quality through intensified reviews by Peer Review Organizations, a 19 percent increase in funding for the State Survey and Certification program, and other measures.

- Limiting through Medicare reforms unwarranted health care spending that is projected to rise at an average rate of over 10 percent per year.

- Strengthening the future of the American family by promoting self-sufficiency through work and a new initiative aimed at reducing infant mortality.

- Increasing spending for Acquired Immune Deficiency Syndrome (AIDS) by 28 percent to accelerate progress in the search for a treatment and cure.

The budget also meets the strict test of deficit reduction. In order to meet the Gramm-Rudman-Hollings deficit reduction target for 1988, the President's Budget proposes programmatic and revenue changes amounting to $42.4 billion. My Department's share of that reduction is $12.0 billion or 28 percent of total.

Despite the size of these deficit reduction measures, HHS will spend a total of $361.3 billion in 1988, an increase of 3.8 percent over 1987. Moreover, even after the extensive reforms proposed in this budget to curb the rapidly escalating costs of the Medicare program, we estimate that Medicare will continue to grow at an average rate of almost 8 percent a year -- well above the expected rate of increase of the medical care component of the consumer price index.

The following provides a more detailed overview of this budget by function.

EDUCATION, TRAINING EMPLOYMENT AND SOCIAL SERVICES (Function 500)

The HHS budget includes budget authority of $6.9 billion under function 500, primarily for the social services activities of the Office of Human Development Services (OHDS).

BLOCK GRANTS

The 1988 budget request provides for the Social Services Block Grant at the full authorization level of $2.7 billion.

The Community Services Block Grant and discretionary activities are budgeted at $?10 million. In 1988, States will begin a process of phasing down their dependency on this program. During the four-year phase-out period, local grantees should have adequate time to find funding from other Federal, State, local and private sources to support their highest priority and most effective community service activities.

SOCIAL SERVICES DISCRETIONARY ACTIVITIES

The 1988 budget includes a request of $2.2 billion for all of the discretionary social services activities administered by OHDS. This request includes funding for 26 distinct programs. Priority will continue to be placed on Head Start, Child Welfare Services, Aging services and nutrition programs, Developmental Disabilities grant programs, and financial assistance grants for Native Americans. The Department intends to increase Head Start $20 million above the 1987 program level. Specific funding levels for other programs will be determined based on the best opportunities to serve children, older Americans, the developmentally disabled, and Native Americans.

FAMILY SOCIAL SERVICES

The 1988 budget requests a total of $682 million for the foster care and adoption assistance programs aimed at keeping families together or supporting other appropriate living arrangements when reunification of children and families is not possible.

Five discretionary programs formally funded under the Family Social Services account (Child Welfare Services, Child Welfare Training, Child Welfare Research and Demonstration Projects, Adoption Opportunities, and Social Services Research) have been requested as part of the generic appropriation request

for social services discretionary activities under the Human Development Services account.

The request for foster care and adoption assistance includes a legislative proposal aimed at controlling State administrative and training costs, by limiting these costs to 50 percent of the amount reimbursed for maintenance payments under each program. Without this change, we would spend 60¢ in State administrative costs for every dollar devoted to the support of children. This legislation is estimated to save $84 million in 1988, and would not reduce payments to families.

In addition, a 1987 supplemental request is proposed to provide $127 million for foster care prior-year claims and $38 million for adoption assistance prior-year claims and additional 1987 program costs. Funds for this supplemental will be partially offset by reallocating $122 million from other OHDS programs (independent living, child welfare services, aging research, and Title XX unobligated balances). The remaining $43 million is requested in new budget authority.

WORK INCENTIVES

In 1988, no funds are requested for the Work Incentives (WIN) program, consistent with the Congress' decision to provide only $103 million for transitional closeout funding in 1987. This budget includes a legislative proposal to establish a Greater Opportunities through Work (GROW) program under the Aid to Families with Dependent Children program. This new program would stress the employability and self-sufficiency of welfare recipients. The proposal recognizes the importance of completing a high school level of education for both teens and adults. A more complete description of this proposal follows in the income security section. In addition, States would be given

flexibility to continue successful work alternatives now being run under the WIN demonstration authority.

STATE LEGALIZATION IMPACT ASSISTANCE GRANTS (IMMIGRATION REFORM)

The Immigration Reform and Control Act of 1986 (IRCA) established an interim program of grants to States to assist with their costs of providing financial medical and educational assistance to newly legalized aliens for the period 1988-91. We estimate that States will receive $928 million of the $1 billion appropriated for this program in 1988. This amount reflects authorized allocations for Federal administrative costs, and for the Federal share of costs in programs (primarily Medicaid and Food Stamps) for which these newly legalized aliens are eligible. This latter allocation is limited by statute to $70 million in 1988, with adjustments to be made in each subsequent year based on actual Federal expenditures. We estimate that services will be available to 1.5 million aliens from the $928 million in State grants.

HEALTH

(Function 550)

The Department's Medicaid and discretionary health programs are included in this function. The budget requests outlays of $37.1 billion for these programs in 1988.

FEDERAL ASSISTANCE TO STATE MEDICAID PROGRAMS

Taken together, the States and the Federal government are estimated to spend about $48.4 billion in FY 1988 on State Medicaid programs under this budget proposal, which includes a $1.3 billion reduction in Federal matching grants to States. The budget proposals would stem the rate of growth in the Medicaid program and provide States with an incentive to adopt

new cost-containment and efficiency measures. Without these proposals, the budget is expected to grow at a rate of approximately 8.5 percent between 1988 and 1992, or 1.7 times the rate of medical inflation.

Medical Assistance Payments

Medical assistance payments to States in 1988 would be limited to $25.4 billion. This represents a $1.3 billion reduction below current spending projections. States would continue to receive matching Federal payments but only up to each State's individual growth limit. Federal spending in future years would be limited to inflationary adjustments as measured by the Medical Care Component of the Consumer Price Index.

We are also proposing a separate one-time $300 million contingency fund in 1988. This fund would be available for States which have costs above their limit despite aggressive measures to control costs.

By replacing the present system of open-ended payments to States, these reimbursement limits should assist States in adopting new and innovative measures of managing their programs. A number of legislative measures will also be proposed to enhance State flexibility in operating their programs. Measures would include such things as: the ability to target services to specific groups; and the ability to provide services on less than a statewide basis.

Medicaid Administrative Costs

The 1988 budget also proposes to eliminate all special matching rates for State and local administrative costs. All Medicaid administrative activities would be matched at the general administrative match rate of 50 percent. These special

subsidies are no longer necessary. A uniform matching rate would greatly simplify the administration of this program and encourage States to allocate costs efficiently.

Matching rates would also be reduced for States with excessively high per recipient administrative costs (e.g., costs above 135 percent of the national median).

These administrative cost proposals would save $275 million in 1988. Related proposals have been advanced for the AFDC, child support enforcement, and food stamp programs.

Prepaid Health Service Delivery Systems

In addition, several Medicaid legislative proposals will give States the incentive and greater opportunity to expand the use of health maintenance organizations and other forms of prepaid health service delivery systems. These include the following:

- Medicaid Capitation Projects: We propose that beginning in 1988, States be offered financial incentives to make more extensive use of prepaid health service delivery systems. For each new capitation project, the Federal matching rate would be increased three percentage points in the first year, two percentage points in the second year, and one percentage point in the third year.

- Medicaid for State-qualified HMO's: States would have the option of extending Medicaid eligibility for up to six months to HMO enrollees in State-qualified HMO's. Currently, only Federally-qualified HMO's have this option.

- o HMO requirements for Health Insuring Organizations: The Medicaid requirement that health insuring organizations contracting with Medicaid meet HMO standards would be repealed. This change would produce savings of $5 million in 1988.

Infant Mortality Initiative

Beginning in 1988, the Department will undertake a major initiative to provide comprehensive case management services to pregnant women, including those who are at high risk of having low birth weight children and teenage pregnancies. This will be done through demonstration projects under Medicaid which will be coordinated with the delivery of services through other Federal programs such as Community Health Centers, the Maternal and Child Health Block Grant, and Women, Infants and Children program. Funding of $85 million for this initiative would be made available through the reduction of the special matching rate for family planning services.

DISCRETIONARY HEALTH PROGRAMS

For the discretionary health programs of the Public Health Service (PHS) in 1988, we are requesting a program operations level of $10.4 billion, including $10.2 billion in outlays.

Three key elements comprise nearly 75 percent of the PHS budget for 1988: $6 billion for health research programs; $1.2 billion for health block grants to the States; and $534 million for research and prevention efforts against Acquired Immune Deficiency Syndrome (AIDS), an increase of $118 million, or 28 percent, over the 1987 level.

Health Research

The 1988 request includes $5.5 billion in program operations for the National Institutes of Health (NIH) and

$494 million for the Alcohol, Drug Abuse and Mental Health Administration (ADAMHA) which will continue support for basic biomedical and behavioral research that will be translated into future long-term improvements in medical care and the health of the American people.

The principal element of the request is $3.1 billion for the support of over 19,000 research projects in NIH in both 1987 and 1988. While the 1987 appropriation provided a 17 percent increase in research funding over 1986, such a large increase, especially in research project grants, cannot be sustained without significant displacement of other activities.

Therefore, to maintain a balanced program and, at the same time, respond to the public demand for deficit control, NIH proposes to extend the availability of $334 million of the increased 1987 appropriations into 1988. This approach will provide stable funding for research projects in both years at levels which are the highest ever achieved by NIH. In addition, the other NIH activities, such as research centers, contracts, training, and intramural research, will be funded at $2.5 billion in 1988, approximately the same level as in 1987.

Similarly, the ADAMHA budget requests $361 million to support approximately 1,600 research project awards in 1988. Of this amount, $5 million is proposed to be derived from extending the availability of a portion of the increased 1987 research funds.

Health Block Grants

A total of $1.2 billion is included in the 1988 budget for four health block grants. These funds serve as a principal means for assisting the States in meeting their priorities in areas such as maternal and child health, preventive health, and

alcohol, drug abuse and mental health services. The States have exercised their extensive discretion over these funds to reduce infant mortality, promote healthy lifestyles, and help individuals solve their substance abuse problems.

Acquired Immune Deficiency Syndrome (AIDS)

The 1988 budget includes $534 million throughout the PHS to support research on the causes and cures for AIDS and preventive educational efforts. This will bring the total level of resources expended on AIDS since 1981 to nearly $1.4 billion.

In total, over 29,400 AIDS cases and more than 16,600 AIDS-related deaths in the U.S. have been reported to the Centers for Disease Control since June 1981. Yet, extraordinary progress has been made in a relatively short period of time in understanding this new and devastating disease, including identifying risk groups and routes of transmission; identifying the causative virus; developing tests to ensure the protection of the Nation's blood supply and hemophiliacs; initiating clinical studies of promising therapeutic drugs; and developing public health guidelines for high-risk populations, health care workers, schools, blood collection centers, and others.

In addition, the Surgeon General's Report on AIDS was issued in October 1986. This succinct document has received widespread attention and, we believe, has stimulated a much greater and more accurate understanding of the AIDS problem by the American public.

In 1988, increased spending will occur in all aspects of AIDS research and prevention activities. Emphasis will be placed on the development and application of various vaccine and therapeutic intervention strategies, including the clinical evaluation of drugs such as AZT. Increases are also slated for

intensive epidemiological studies to trace the incidence of HIV infection, as well as for public education and information dissemination efforts. In this latter category, we plan to spend $104 million in 1988, triple the amount spent just two years ago.

Other Areas of Special Concern

Immunization: A record level of $94 million is requested for the childhood immunization program, an increase of $7 million over 1987. Funds in the request are sufficient to purchase the same number of vaccines, 18.1 million doses, as were provided for in 1987.

To maximize the funds available for vaccine purchases within a growing budget, we have reallocated about $13 million of the grant funds available for State operational expenses. However, to enhance the States' ability to recover these administrative costs, CDC has revised its immunization program guidelines that currently prohibit States from assessing nominal fees to parents whose children receive this service.

The immunization budget also includes $4 million, the same amount available in 1987, to continue development of a vaccine stockpile.

Infant Mortality: The Department is continuing to focus efforts on reducing rates of infant mortality in this country. Among the major sources of support for addressing this problem is the National Institute of Child Health and Human Development, which will conduct research in areas such as fetal development, pregnancy and birth, roles of nutrients and hormones in growth and development, and causes and prevention of mental retardation. The Maternal and Child Health Block Grant is also being maintained at $478 million in 1988.

In addition, $85 million will be devoted to a new infant mortality initiative under Medicaid. Legislation will be proposed authorizing Medicaid demonstrations with emphasis on providing comprehensive case management services to pregnant women who are at risk of having low birth weight babies. This is discussed more fully in the Medicaid section of this statement.

Substance Abuse: In addition to $126 million for the National Institute for Drug Abuse and a portion of the $495 million Alcohol, Drug Abuse and Mental Health Block Grant, the 1987 appropriation provided $252 million to carry out the Anti-Drug Abuse Act of 1986. These funds will support research, prevention, and treatment activities in both 1987 and 1988. Of this amount, $22 million will be used to establish a new Office for Substance Abuse Prevention; $20 million will support demonstration programs for high-risk youth; $33 million will enhance ongoing research, direct operations, and program management activities; $14 million will augment the State block grants; and $163 million will go to support alcohol and drug treatment programs within the States.

Health Professions: The 1988 budget requests $31 million for primary care health professions education. Emphasis will be placed on programs to promote training in family medicine and geriatric health care. Specifically, these two programs are designed to respond to the expanding elderly population and to develop the capacity to care for people as outpatients, rather than on the more costly inpatient basis. This more limited and targeted approach to health professions training support also reflects the general surplus and improved distribution of our national supply of health care practitioners.

The Health Education Assistance Loan Program (HEAL) will

provide $100 million of new guarantees for private loans to graduate students in health professions schools. Complementing recently issued final regulations, aggressive efforts to reduce loan default rates and to ensure the long-term solvency of the loan insurance funds will be proposed. Borrowers will be required to pay premiums sufficient to maintain the fund's solvency, and lenders will share in 20 percent of the loan liability.

Community Support Program: The budget also includes $20 million, an increase of $5 million over 1987, for demonstrations of community-based care targeted to the chronically mentally ill who constitute a substantial portion of the homeless population. States will be provided these funds through the ADAMHA Community Support Program which can be used to plan and develop better service delivery systems for these target groups.

MEDICARE

(Function 570)

For 1988, the budget for the Department of Health and Human Services includes net outlays at a proposed level of just over $73 billion for Medicare. This represents a net increase over 1987 estimated outlays of $1.4 billion. The budget proposes legislative and regulatory changes that would produce an estimated $4.7 billion in outlay savings in 1988.

Medicare proposals reflected in the 1988 budget, which include selected increases as well as proposed reductions, fall into a number of categories and are discussed below under headings describing their principal themes: advancing private health plan options, assuring quality health care for

beneficiaries, promoting increased competition and efficiency, and increasing beneficiary and third party cost-sharing.

PRIVATE HEALTH PLAN OPTION

One of the major aims of the 1988 budget for the Department of Health and Human Services is increased emphasis on giving Medicare beneficiaries and providers opportunities to participate in Medicare through private health plans. This approach reflects the basic principles of this Administration's Medicare policy:

- o to reduce the Government's direct role in medical and pricing decisions;
- o to increase choices for beneficiaries and providers;
- o to assure and enhance quality of care;
- o to increase competition among private organizations responsible for health care delivery, and
- o to increase incentives for efficiency.

Because of the inability of the traditional fee-for-service approach to control costs and provide consistent quality of service, we can already see a strong potential for a substantial shift in the private market toward managed health care systems such as health maintenance organizations (HMO's) and preferred provider organizations.

Medicare began to use HMO's and competitive medical plans (CMP's) in 1985 through contracts paid on a prospectively priced basis in order to expand the choices available in Medicare for beneficiaries and providers. Since that time, we have developed

a comprehensive strategy to promote a private health plan option under Medicare, including:

- Research and demonstrations - to examine ways to improve Medicare's rate formulas and to test a variety of innovative approaches to using private health plans; for example, "Medicare Insured Groups" through which Medicare rates would be based on the cost experience of particular beneficiary groups such as retirees of an individual employer. The budget includes $8 million of new demonstration funding for 1988 to test private sector approaches, including $5 million to establish a series of projects to explore ways in which Medicare can benefit from innovative private sector arrangements such as preferred provider organizations and negotiated provider agreements.

- Beneficiary and public education - to inform beneficiaries, employers, unions, and other groups about the advantages of private health plan options.

- Legislation - to deal with problems currently facing HMO's and CMP's and to expand choices for beneficiaries and providers.

Under the legislative piece of the Private Health Plan strategy, a number of proposals is included in the 1988 budget.

- Expanded Choice: Legislation will be proposed to allow the government to contribute an amount equal to 95 percent of the cost to care for a beneficiary under traditional Medicare to a wide array of private plans. Such plans would be required to offer a benefit package equal in value to Medicare benefits. Enrollment would be strictly voluntary, and each year beneficiaries would have an opportunity to change plans or return to

traditional Medicare coverage. This proposal is estimated to cost $50 million in 1988 and $250 million through 1992.

- Three-year contracts: The Administration also proposes to permit HMO's/CMP's to choose either the current one-year adjusted average per capita cost (AAPCC) rate or an alternative three-year rate which is slightly lower than the one-year rate. The three-year alternative would provide HMO's/CMP's greater certainty in their financial planning in exchange for a small reduction in the rate. This proposal is estimated to have no savings in 1988 and to have a five-year savings through 1992 of $40 million.

- Eliminate premium and profit restrictions: The Administration proposes that for small private health plans and plans competing in markets with three or more plans, existing restrictions on premiums and profits be eliminated.

- Recovery of Lost Revenue: This proposal would permit TEFRA Risk HMOs and CMPs to recover revenues lost due to legislative action by adjusting premiums, benefits, or copayments (or some combination of adjustments) with prior approval from this Department. This change would be budget neutral.

- HMO/CMP Monetary Penalties: We propose to establish civil monetary penalties in the law in order to improve sanctions on HMO's/CMP's which deny necessary treatment, overcharge, inappropriately screen out or disenroll Medicare beneficiaries. There is not expected to be any significant budgetary effect.

Quality of Care

An increased amount of funding has been directed to ensuring access to quality health care for Medicare program beneficiaries in recent years. Our efforts have been carried out through intensified review of quality by the Peer Review Organizations (PROs), enhanced enforcement of facility conditions of participation through the State survey and certification process and increases in funding for quality of care and prevention studies through the Health Care Financing Administration's research program.

Approximately $176 million will be spent on PRO activities in 1988. The scope of work for the second biennial round of contracts (1987 and 1988) redirects program efforts to ensuring quality of care. This includes strengthening the intervention process when quality problems are found; mandating that a comprehensive set of quality screens be used; focused review of problem providers and physicians, particular procedures, premature discharges and discharge planning, transfers, certain readmissions, and preadmission review for certain procedures. A community outreach program is also required using seminars, hotlines, brochures and even beneficiary representatives on governing boards to assure that the PRO program is both familiar and responsive to the beneficiaries it safeguards.

Additionally, recent reconciliation bills require new review activities for services provided by Ambulatory Surgical Centers, Health Maintenance Organizations, Competitive Medical Plans and for certain surgeries. An increased emphasis on beneficiary services will also be provided through coordination of a second surgical opinion program and increased responsiveness to complaints and inquiries by beneficiaries regarding quality of care in all settings subject to PRO

review. Most significant, however, may be the provision for denial of payment for substandard health care.

Funding for the State Survey and Certification program is requested at $69 million in 1988. This is an increase of 19 percent over the level available in 1987 and 41 percent greater than the amount spent on this program in 1986. This level will allow adoption of many of the Institute of Medicine (IOM) study recommendations on nursing homes, strengthening of program enforcement through the use of intermediate sanctions against providers out of compliance with program conditions (yet posing no immediate threat to the health and safety of patients), development of better survey instruments, enhancement of data bases and improved surveyor proficiency as a result of innovative training.

In 1986, letters were sent to State Governors stressing the importance of these Federal and State enforcement programs and instructions were issued to HCFA Regional Administrators re-emphasizing our commitment to working with State Health Departments to assure access to quality health care for program beneficiaries. In 1988, we plan to continue our efforts to work cooperatively with each State to ensure that only the highest quality of health care available is offered to program beneficiaries.

The 1988 HCFA Research budget request reflects planned spending of $7 million for quality of care and prevention and beneficiary awareness studies. Plans include developing and refining valid, non-intrusive quality of care measures for different treatment settings; a national study of hospital aftercare under PPS; integrated payment and quality assurance systems for residential health care facilities and studies and

demonstrations testing the economy and efficacy of Medicare reimbursement for certain other services.

In addition to these efforts, $137 million will be spent by Medicare contractors for medical review activities and prior authorization of nursing home and home health services will be initiated.

Promoting Competition and Efficiency

Another major focus of the 1988 budget for the Medicare program is the promotion of increased competition and efficiency among health care providers. The Prospective Payment System (PPS) remains a cornerstone in efforts to reduce costs, while at the same time maintaining a high level of quality in the care provided. The 1988 budget contains several proposals intended to further refine PPS, thus increasing its effectiveness in constraining higher medical costs.

Establish Prospective Payment Policy for Reimbursement of Hospital Capital Costs

This regulatory proposal would gradually incorporate payment for hospital capital costs into the Prospective Payment System (PPS) at the level envisioned by the Congress in the Omnibus Budget Reconciliation Act of 1986 (OBRA).

The Social Security Amendments of 1983, which created PPS for hospital operating costs, intended for capital costs to be folded into PPS by October 1, 1986. This timeline was revised by OBRA, however, which retained reimbursement for capital on a cost basis, while providing for a 7 percent reduction in capital-related payments in 1988. By maintaining a system of open-ended cost reimbursement, adequate incentives for increased efficiency are not provided.

In order to provide hospitals with adequate time to make a smooth transition in the revised payment system, the proposal would be phased in over a period of two years for movable equipment and ten years for fixed capital. By the end of these transition periods, a fixed payment combining both capital and operating costs would be made for each Medicare admission. In keeping with the intent of Congress, as expressed in OBRA, total capital payments would be equal to those which would have been made under cost reimbursement less 7 percent in 1988 and 10 percent in 1989.

Prospective Payment of Radiology, Anesthesiology, and Pathology Services Provided to Hospital Inpatients

In order to address rapidly rising physician service costs in the inpatient setting, the 1988 budget proposes legislation to modify the way Medicare pays for radiology, anesthesiology, and pathology services provided to hospital inpatients.

Currently, Medicare pays for these services using an inherently inflationary fee-for-service system based on customary, prevailing, and reasonable physician charges.

Under this proposal, payments for services provided by hospital-based physicians would be aggregated into a fixed average payment per discharge in a manner similar to the way PPS is now structured. Thus, for each type of case, an average rate would be paid for the radiology, anesthesiology, and pathology services associated with it.

By fostering increased competition in the delivery of these services, as well as creating incentives for hospitals and physicians to become more efficiency-minded, this proposal will provide program savings of $10 million in 1988.

Restore Discretion of Secretary to Establish Update Factor for Prospective Payment System (PPS) Rates

We are proposing to restore the discretion of the Secretary to set the PPS update factor for 1988 and beyond. The Social Security Amendments of 1983 mandated the Secretary to establish an annual update factor for the Prospective Payment System rates after taking into consideration a variety of factors including, but not limited to, the predicted rise in the hospital market basket.

The Omnibus Budget Reconciliation Act of 1986 (OBRA), served to limit the discretion of the Secretary in setting the PPS update factor by setting the 1988 rate of increase as equal to the rise in the hospital market basket minus two percentage points (MB - 2). For 1989, OBRA mandated that the rate of increase not exceed the rise in the market basket, while no limit was specified for fiscal years beyond 1989.

Under this proposal, the PPS update for 1988 would be set by the Secretary, at an amount necessary for the efficient and effective delivery of medically appropriate high quality health care. This would be based on assessing the most current and highest quality data available in accordance with procedures and timetables specified in the statute. In this way, we believe that our goal of constraining inpatient hospital costs without reducing either access or quality can be realized. Based on an assumed average payment increase of 3.9 percent, we expect this proposal to result in 1988 Medicare program savings of $510 million.

Reform Direct Medical Education

Several legislative changes in the area of direct medical education will be undertaken to insure that payments are made

only for costs directly related to the clinical care of Medicare patients.

Currently, Medicare makes direct payments to teaching hospitals for medical education costs which include the salaries and benefits of interns and residents, a portion of teaching faculty salaries, associated program and classroom costs, and the training costs of nurses and allied health professionals.

In the 1988 budget, we propose to repeal the prohibition against further limits on direct medical education as provided in the Consolidated Omnibus Budget Reconciliation Act of 1985. Consistent with efforts to place reasonable constraints on Medicare payments, particularly those that do not benefit Medicare patients, we propose to eliminate inappropriate education subsidies for classroom and other educational program costs, as well as payments for the direct training costs of nurses and allied health professionals whose primary function is to supplement the physician's function. As a result of such proposals, Medicare will realize program savings of $310 million in 1988.

Make Indirect Medical Education Payment Consistent with Disproportionate Share Payment

The 1988 budget proposes legislation to reduce the factor used to determine indirect medical education payments to 4.05 percent indefinitely.

Medicare currently pays teaching hospitals for the indirect costs associated with interns and residents through an adjustment to their PPS rates. When Congress instituted a separate subsidy for hospitals serving a disproportionate share of low-income patients, as part of COBRA, the indirect medical education factor was reduced from 8.7 percent to 8.1 percent.

This proposal recognizes that the current indirect medical education adjustment remains too high in light of the existence of a separate subsidy made to disproportionate share hospitals. Assuming the continuation of these disproportionate share payments, the proposed indirect medical education factor of 4.05 percent is more appropriate in that it removes the windfall payments currently being made to teaching hospitals for medical education. Savings are estimated at $835 million in FY 1988 from this proposal.

Physician Payment Reforms

The 1988 budget also proposes to increase competition and efficiency by other selective physician reimbursement changes. This reflects the fact that Medicare payment for physician services is one of the fastest growing activities in the Federal budget. The budget includes several proposals to slow this rate of growth. These reforms would correct selected areas of overpayment and would save $190 million in 1988.

- Medicare is the nation's dominant payer for cataract surgery. Even after the reductions established in the Omnibus Budget Reconciliation Act of 1986 cataract surgery remains one of Medicare's most highly paid procedures on an hourly basis. The Department's proposal would establish more reasonable reimbursement rates by reducing prevailing charges for cataract surgery by an additional 13 percent.

- Another proposal would set customary charges of new physicians at no more than 80 percent of the prevailing charge. This would correct an inequity in the current system which results in new physicians sometimes being paid at higher rates than established physicians.

- Limits would be placed on prevailing charges for certain medical or surgical services where there is a large variation between the charges of specialists and non-specialists.

- Prevailing charges would be reduced for procedures that are geographically excessive; for procedures that are overpriced because of technological or productivity advances; and where surgical global fees are excessive.

Modify OBRA Prompt Payment Provisions

Under this legislative proposal, the provisions regarding the payment of clean claims contained in the Omnibus Budget Reconcilliation Act of 1986 (OBRA) would be modified by extending the 30-day ceiling for 1987 to 1988 and beyond. Thus, 95 percent of clean claims would be paid within 30 days of receipt.

OBRA now calls for 95 percent of clean Part A claims to be paid in not more than 30 days in 1987; 26 days in 1988; 25 days in 1989; and 24 days in 1990 and beyond. For Part B, OBRA specifies the same timeline with the exception that Medicare-participating physicians will be paid at a faster rate beginning with 1988.

This proposal provides for a maximum 30-day payment cycle for processing of Medicare clean claims a schedule that is reasonable for both the Federal government and Medicare providers - and one that is a commonly accepted business practice. We estimate the savings from this proposal to be $890 million in 1988.

Other Competition and Efficiency Proposals

The Department's 1988 budget also proposes savings from improved competition and efficiency to be realized through: eliminating periodic interim payments for disproportionate share hospitals; eliminating return on equity payments to for-profit hospital outpatient departments and skilled nursing facilities; repealing provisions in OBRA which would expand Medicare payments to non-physicians for vision care and occupational therapy, as well as establish new end stage renal disease facility rates; and requiring durable medical equipment suppliers to furnish equipment to Medicare beneficiaries on the basis of lump-sum or lease-purchase agreements.

INCREASED THIRD-PARTY PAYMENTS AND COST-SHARING

Several proposals in the 1988 budget would result in increasing beneficiary cost-sharing and reimbursement from third-party payers.

Medicare Part B Premium and Deductible

The Medicare Part B premium would be set at separate levels for three categories of payers: new beneficiaries; current enrollees; and third-party payers. The premiums for current enrollees would be set at 25 percent of program costs each year, thus extending permanently the current provision of law which expires at the end of 1988. For new enrollees, premiums would be set at 35 percent of program costs beginning in 1988. For third-party payers, the premium would be set at 50 percent of program costs.

This proposal is designed to create a more equitable balance between general revenue and premium financing of Medicare Part B consistent with the original intent of the program. When the Part B program was first established, premiums paid by beneficiaries represented 50 percent of

estimated program costs. However, between 1976 and 1983, Part B increases were limited to Social Security cost-of-living adjustments, and as a result, the relative share of Part B financed by premiums has fallen substantially.

This proposal would result in additional premium income of $571 million in 1988 and $15.7 billion between 1988 and 1992.

The Part B deductible would be indexed and automatically updated to reflect changes in Medicare benefits to the Medicare Economic Index beginning in 1988. The annual deductible is now $75. Under current economic assumptions, this proposal would cause the deductible to rise $2 in 1988 to $77.

The deductible has only been increased twice since it was set at $50 in 1966, and it has not even kept pace with general rises in prices. In fact, in constant 1966 dollars, today's deductible of $75 is worth only $22, less than 50 percent of the original $50 deductible. This proposal to index the deductible would only result in a small increase in beneficiary costs (some of which will be covered by supplementary private insurance) but would help to maintain the real dollar value of the deductible over time.

Coverage of State and Local Employees Under Medicare

The Consolidated Omnibus Budget Reconciliation Act of 1985 extended coverage under Medicare to State and local employees hired after March 31, 1986. This proposal would expand this coverage to include State and local employees hired before March 31, 1986 as well.

This proposal corrects an inequity in the financing of Medicare coverage. Under the current system, many State and local employees become eligible for Medicare on the basis of

short periods of work which are covered by Social Security. They have not, however, contributed their fair share to the Hospital Insurance Trust Fund like the majority of Medicare beneficiaries who have contributed during most of their working years. In addition to correcting this inequity, this proposal has the advantage of extending Medicare coverage to State and local government workers who now have no opportunity to enroll. Revenues to the Hospital Insurance Trust Fund would increase by $1.6 billion in 1988.

First Full Month of Eligibility

Under curent law, Medicare eligibility begins on the first day of the month in which a beneficiary turns 65. The 1988 budget proposes to begin eligibility on the first day of the month after an individual turns 65.

This proposal should not result in a lapse of health insurance coverage because most beneficiaries have private insurance policies which will cover them until the beginning of Medicare coverage. This proposal would save an estimated $295 million in 1988.

Medicare Secondary Payer

Third-party coverage would also be increased under the budget through a proposal which would make Medicare the secondary payer for disabled individuals and their families who work and have health care coverage from a medium-sized group health plan. This proposal extends the provision in the Omnibus Budget Reconciliation Act of 1986 which made Medicare the secondary payer for the disabled covered by large employer-based health plans.

This proposal would result in increased third-party payments without adversely affecting beneficiaries. Medicare

beneficiaries would continue to receive services which are at least as comprehensive as Medicare alone. Savings resulting from this proposal would be $120 million in 1988.

INCOME SECURITY

(Function 600)

The Department's income security programs for the aged, disabled and poor will have estimated outlays of $24.8 billion in 1988. This is a net decrease of $164 million below the 1987 level.

SUPPLEMENTAL SECURITY INCOME

The 1988 outlay estimate for the SSI program is $12.3 billion, an increase of $1.4 billion over 1987 that is due mainly to the fact that thirteen monthly payments fall in fiscal year 1988, compared to twelve monthly payments in fiscal year 1987. Federal benefit payments under this program will provide assistance to an average of 4.0 million recipients each month in 1988, compared to 3.9 million in 1987.

The increase in benefit payments also reflects an estimated cost-of-living increase of 3.5 percent payable in January 1988.

FAMILY SUPPORT PAYMENTS TO STATES

The Family Support Payments to States request includes $9.8 billion in outlays for the following two programs, Aid to Families with Dependent Children and Child Support Enforcement.

Aid to Families with Dependent Children

A total of $9.0 billion is included in the 1988 budget for the AFDC program. These expenditures will provide assistance to an average of 3.8 million families each month.

The AFDC request includes several legislative proposals. These are intended to ensure that States operate their welfare programs cost-effectively, that the employability and self-sufficiency of welfare recipients is increased, that strong work requirements exist for all able-bodied recipients, and that assistance is provided only to those who are in need but unable to provide for themselves. In 1988, these legislative proposals are estimated to save $322 million in AFDC; through 1992, savings would amount to over $1.9 billion.

The specific proposals are as follows:

Reform Welfare Administration

The 1988 budget proposes for Federal welfare programs to reduce Federal matching payments for State administrative costs above specified levels of per recipient costs. States could offset excess costs in one program against cost efficiencies in the others. For AFDC, State payments would be matched at the current 50 percent rate up to 125 percent of the State's median per recipient cost; at 25 percent for costs between 125 and 150 percent of the median; and would receive no Federal matching payments for costs above 150 percent of the median. Adjustments would be made for certain factors, including State employee wage differentials.

The Department also proposes to phase out the higher Federal matching rate for statewide data systems development, reducing it from 90 to 75 percent in 1988. States would have through 1990 to complete their statewide systems development at the 75 percent rate. Thereafter, the match would be at the regular 50 percent rate for administrative costs. Together, these two proposals are expected to reduce administrative costs by $16 million in 1988, and by $73 million through 1992.

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Mandate Activities to Increase Welfare Recipient Employability

The Department is proposing an expanded initiative of Greater Opportunities through Work (GROW) to increase welfare recipients employability and self-sufficiency. Unlike past proposals, GROW includes a focus on teen parents--a group at high risk of dropping out of school and becoming long-term welfare recipients. GROW also recognizes that education or short-term, employment directed training may be necessary for recipients to obtain meaningful jobs that ensure their ability to remain self-sufficient. Therefore, education and training are included as allowable activities.

States will be required to stress continued schooling for teens without a high school diploma, remedial or basic education for adults on welfare with less than a high school education, and participation in job search or work-related activities for other employable AFDC recipients. States would be given flexibility to continue successful work alternatives now being run under the Work Incentives demonstration authority. Parents with young children must also participate, although an exception would be made for the first few months following birth. This initiative is estimated to have a net cost of $8 million in 1988, but to have net savings of $932 million through 1992.

End Caretaker Benefits When Youngest Child Turns Age 16/ Essential Person Limitation

This proposal would exclude caretaker relatives in calculating AFDC benefits when the youngest child reaches age 16. This is similar to ending benefits for spouses with children in their care when the youngest child reaches age 16 under the Social Security Old Age Survivor's and Disability Insurance programs. This proposal would not affect the child's benefits, but recognizes that these adults are sufficiently free from child care responsibilities to pursue employment. The

household's assistance would be phased out, rather than terminated at a single point, easing the caretaker's transition into the workforce. This proposal would also limit essential persons (those in the household whose needs and income are considered in determining the AFDC grant) to those needed in the home to care for a child or incapacitated adult. This latter change is necessary to insure that limited resources are expended only on those individuals whose receipt of benefits is essential to the family. Savings are estimated at $106 million in 1988 and $557 million through 1992.

Require that Single Minor Parents Live With Their Parents to be Eligible for AFDC

States would be required to withhold eligibility from minor parents who have never been married and who establish separate households, unless certain conditions exist, for example, a situation where the health and safety of the minor parent would be jeopardized if they lived with their parents. States would also have to make the AFDC payment to the minor's parents, unless the parents are likely to mismanage the payment. This proposal seeks to discourage the practice of minor parents leaving the home of their parents to claim AFDC. Savings are estimated at $20 million in 1988 and $108 million through 1992.

Require Quality Control Disallowances to be Collected Prospectively

Under this proposal, State AFDC erroneous payments for 1988 and succeeding years in excess of the 3 percent threshold in law would be prospectively withheld on October 1 of each fiscal year (July 1 for 1988 due to the COBRA moratorium on collections). Adjustments to reflect actual liabilities would be made to the following year's AFDC grant. Pre-1988 liabilities would continue to be collected retrospectively. This change would make collection of these disallowances consistent with current

practice in the Medicaid program. Savings are estimated at $188 million in 1988 and at $248 million through 1992.

CHILD SUPPORT ENFORCEMENT

Implementation of changes made by the Child Support Enforcement Amendments of 1984 will continue as a major priority in 1988. We estimate that total child support collections will have increased by 160 percent since 1980, from almost $1.5 billion to more than $3.9 billion in 1988. Of the 1988 amount, over $1.4 billion will be collected on behalf of AFDC families. The 1988 budget reflects outlays of $745 million for this program and includes three legislative proposals to strengthen incentives for more cost-effective operations, as follows:

Accelerate Reduction in Federal Financial Participation for State/Local Administrative Expenses

This proposal would reduce the Federal matching rate for Child Support Enforcement activities to 66 percent beginning in 1988, two years ahead of schedule. Under current law, the Federal matching payment is scheduled to be reduced to 68 percent of State payments in 1988, and to 66 percent in 1990. Reducing the current Federal matching payment for State's administrative costs gives them an incentive to make up the difference through more efficient collection of support payments, which is rewarded through higher incentive payments. This proposal is estimated to save $23 million in 1988 and $47 million through 1992.

Reduce Enhanced ADP Matching

The Department is proposing to phase out enhanced funding for the design and development of child support enforcement computer systems by 1990, consistent with similar efforts in the AFDC, Medicaid and Food Stamp programs. Enhanced matching would

be reduced to 75 percent in 1988, and eliminated in 1990, when these activities would be matched at the prevailing rate for State and local administrative expenses of 66 percent. By 1990, States will have had almost a decade in which to design and implement automated systems with enhanced funds. This proposal is estimated to save $4 million in 1988 and $20 million through 1992.

Child Support Incentive Floor/Mandatory Guidelines

The Child Support Incentive Floor proposal would limit States eligible for incentive payments to those which demonstrate a cost effectiveness ratio of 1.4 or above (i.e., collections on behalf of AFDC families are at least 1.4 times the costs of achieving these collections). Currently, States receive an incentive payment of 6 percent of child support collections, regardless of costs of collection. By limiting payments to efficient States, this proposal gives States a stronger incentive to increase the cost effectiveness of their collection efforts.

The Child Support Mandatory Guidelines proposal would require the use of State guidelines as a rebuttable presumption for setting child support awards. States would also be required to periodically review and modify support orders under appropriate circumstances in accordance with the guidelines. Mandatory guidelines will help keep families self-sufficient. For families already dependent on welfare, the increased income from larger support orders offers a way off of AFDC, since these families could do better with a combination of work income and child support rather than welfare benefits. Together, these proposals are expected to save $119 million in 1988, and $806 million through 1992.

LOW INCOME HOME ENERGY ASSISTANCE (LIHEAP)

The 1988 budget requests a $1.2 billion appropriation for LIHEAP, a reduction of $585 million compared to 1987. This reduction is proposed because of additional energy-related resources including Exxon Petroleum overcharge funds and Stripper Well funds which States have available to apply against the low income home energy assistance needs of their citizens from petroleum overcharge lawsuit settlements.

SPECIAL BENEFITS FOR DISABLED COAL MINERS

The 1988 budget request of $903 million is $60 million below the 1987 appropriation. Black Lung benefit levels are maintained at current levels throughout 1988, and a cost of living adjustment limited to half of the current indexation is payable in January 1989. The $60 million decrease in the 1988 request also reflects the continuing decline in the number of beneficiaries receiving payments administered by SSA and certain minor legislative proposals aimed at conforming Black Lung payments with recent Social Security modifications.

REFUGEE AND ENTRANT ASSISTANCE PROGRAMS

In 1988, the budget request for Refugee and Entrant Assistance programs totals $253 million in budget authority. This level of funding is sufficient to subsidize 100 percent of State costs in the provision of services for 24 months to refugees and entrants with categorical eligibility for Federal welfare programs, and for 12 months to individuals without such eligibility.

SOCIAL SECURITY

(Function 650)

The Department contributes to the income security one out of every six Americans through the Social Security programs of

Old Age, Survivor's and Disability Insurance (OASDI). OASDI outlays of $220 billion will constitute about 61 percent of the HHS budget and will provide assistance to approximately 38.5 million Americans in 1988. This represents an increase of $11.5 billion in outlays compared to 1987. Growth in OASDI outlays is due primarily to an estimated increase of 618,000 beneficiaries; a higher average benefit amount due to higher earnings of newer beneficiaries; and to payment in January 1988 of the annual cost-of-living increase currently estimated at 3.5 percent.

These additional benefit costs are well within the projected revenues to the trust funds, which are estimated at $260 billion in 1988. As these figures indicate clearly, the solvency of the Social Security trust funds has been restored, and the necessary build up of substantial reserves to provide benefits to the "baby boom" generation is estimated to grow to $105 billion in 1988, $221 billion by 1990, and to about $1.3 trillion by the year 2000. This rate of growth is crucial to honoring the Social Security compact with today's workers without overburdening the workers of the next generation.

The budget also includes the effects of legislative proposals to improve FICA coverage by eliminating special exemptions in current law for income from tips, weekend military reserve duty, certain student and agricultural employment, and employer paid life insurance premiums exceeding $50,000 of coverage. This proposal would yield over $4.2 billion of revenues and interest over the next five years, including an estimated $515 million in 1987.

For the Social Security Administration's administrative expenses, the FY 1988 budget reflects a reduction of $67 million which is related to SSA's continuing progress in increasing

productivity through systems modernization and other management improvements. While SSA is achieving significant gains in efficiency, all indications are that quality of service is not only remaining high but is improving.

Mr. Chairman, this budget is a well-reasoned, compassionate and responsible plan.

It fully honors our obligations to Americans who need our help.

It carries us further toward the President's vision of a more effective and efficient government, serving all Americans better, and it accomplishes these goals while remaining within the deficit imposed by Congress.

That concludes my remarks, Mr. Chairman, and I would be happy to answer your questions at this time.

CHALLENGES IN BUDGET

Secretary BOWEN. The budget calls for an outlay of $361 billion for a wide variety of health, income security, and social services programs. It amounts to 35 percent of the Federal budget. That is $13 billion higher than 1987's and this reflects an increase in the benefits, more beneficiaries, and the growing cost of health care. But our new budget request also achieves outlay savings of $9 billion while still meeting legally mandated deficit reduction targets.

CATASTROPHIC HEALTH CARE

In addition, I would like to highlight a major initiative of the administration which is soon to be introduced to Congress. This legislation would help to protect 30 million elderly and disabled Americans from the threat of acute catastrophic illness. Under this proposal, Medicare beneficiaries would receive acute catastrophic illness coverage by limiting out of pocket expenses for approved charges to $2,000. This coverage will be made available for an additional modest premium. This program is to be completely self-financed with the premium fully covering the cost of the catastrophic illness benefit. In this way the elderly's health expenditures will become more predictable and their fears of unmanageable expenses will be eliminated.

ENTITLEMENTS

I will now turn to the major provisions of our budget. Federal entitlements make up the overwhelming share of the HHS budget. Foremost among these are the Social Security programs with benefits of more than $220 billion and accounting for almost 61 percent of the outlays. Next in magnitude is Medicare, with an allocation of $73 billion or 20 percent of the budget. Then comes Medicaid, with an allocation of $27 billion or 7 percent. Other entitlement programs account for $27 billion or 7 percent.

DISCRETIONARY PROGRAMS

Discretionary programs, however, amount to almost $15 billion, and are a mere 4 percent of the total. The budget embodies five goals. The first is to honor our obligations to those in the Social Security System. The second is to improve the quality of health care for our citizens. The third is to increase competition and efficiency in health care by expanding private health plan options for Medicare beneficiaries; and the fourth is to control health care costs. Finally this budget aims to strengthen the American family.

SOCIAL SECURITY

The budget honors our basic commitment to those who have worked hard and saved through their Social Security System. It protects the current value of Social Security by providing a cost-of-living adjustment of about 3.5 percent in January 1988. The bipartisan cooperation between this administration and Congress means that our Social Security beneficiaries can face the future with confidence. The financial status of the trust funds continues to improve. By 1992 trust fund balances are expected to total nearly $377 billion.

QUALITY OF HEALTH CARE

This budget contains several proposals designed to improve the quality and effectiveness of our health care system. One is an intensified review of health care quality by peer review organizations. We want to allocate $176 million for this purpose.

We are also asking for more funds to enforce quality control in the delivery of nursing home care through the State Survey and Certification Program. For this purpose, we are asking $11 million more than we asked for in 1987, a 19-percent increase. We are seeking these funds for annual inspections of all nursing homes and better conditions in the health facilities. We cannot improve health quality without controlling costs. Retired and needy people cannot afford excessive medical care costs and neither can Government. We simply must ensure that Medicare and Medicaid are affordable. We propose to do this by further reform of reimbursement policies for physicians and capital expenses by targeting funds better, by eliminating unnecessary reimbursements, by expanding Medicare coverage to State and local employees, and by en-

suring that Medicare does not pay for services already covered by people's private health insurance.

AIDS

Of all the health issues confronting us, none poses a greater challenge than the prevention and control of AIDS. We have made impressive gains in understanding this dread disease.

NOTE OF WELCOME

Senator PROXMIRE. Mr. Chairman, can I interrupt for just 1 minute? I apologize to Secretary Bowen. I have not had an opportunity, unfortunately, to date to hear Secretary Bowen. I have heard great things of him both as a Governor, as a doctor, and especially as a Cabinet officer, and I am delighted that you have the job you have, and I know you do a great job, and you have a terrific pair here in Senator Chiles and Senator Weicker. I worked with Senator Weicker as the ranking member for years. Unfortunately, I have interrupted because I have to leave right way. Unfortunately, I have another hearing, but I did want to come in and pay my respects, and I thank the chairman for letting me do that.

Secretary BOWEN. Thank you for coming in, sir.

AIDS

We have far to go before we can announce a cure. Our new budget recommends $534 million to intensify the battle against AIDS. This is an increase of $118 million, a 28-percent increase over last year's level. Our AIDS budget is managed by the Public Health Service to support research on causes and cures and further preventive education. Included in it is $16 million for the Food and Drug Administration, which is not considered by this committee. With this budget, the total spent on AIDS since 1981 would come to $1.4 billion. Over 30,600 AIDS cases and more than 17,500 AIDS-related deaths in the United States have been reported to the Centers for Disease Control since June 1981. But we have made progress in understanding the disease. We have identified the risk groups and routes of transmission. We have found the virus responsible, developed tests to protect the Nation's blood supply, begun clinical studies for promising drugs, and developed public health guidelines for schools, blood collection centers, and high-risk populations. The Surgeon General's October report on AIDS has received wide attention and brought about better public understanding of AIDS.

We plan to spend more on research and prevention. Emphasis will be placed on developing vaccines and evaluating such drugs as AZT. Increases are also noted for intensive epidemiological studies to trace the incidence of AIDS infections as well as for public education efforts. In this latter category we plan to spend $104 million in 1988 which is triple the amount spent just 2 years ago.

GROW

Our budget takes concrete steps to strengthen the family unit. Most importantly, we seek to promote self-sufficiency through productive work so those in poverty can achieve long-term financial and social stability. To this end we propose amending welfare programs under the Social Security Act by replacing the WIN Program with the GROW Program, which is greater opportunities through work. WIN was not cost effective. A person's chances of getting a job with WIN training are no greater than those coming out of the welfare system who have not participated in WIN. GROW will encourage teenage AFDC recipients to stay in school and will promote remedial education for older persons. We believe this best enhances the job prospects for workers.

CHILD SUPPORT COLLECTIONS

An aggressive Child Support Collection Program is another profamily initiative, and we expect States to achieve child support collections of nearly $4 billion in 1988, up from $3.5 billion in 1987.

INFANT MORTALITY

We are also proposing a new initiative to protect infants, the most vulnerable members of the American family. We want to reduce infant mortality by establishing a new system of Medicaid demonstration projects. These would target pregnant women at high risk of having low birth weight babies. We propose to spend $85 million for this vital program. In consort with our family support initiative, the Family Support Administration that I have established continues its work of integrating our policies and programs. We are requesting $12.5 billion in outlays for fiscal 1988 including previously appropriated advances of $2.5 billion.

MEDICAID

We also request advance appropriations for $10.1 billion for 1989 and $2.7 billion for the first quarter of 1990. Partially offsetting these requests, the Department will propose legislation that should achieve a savings of $468 million in 1988.

We are requesting a 2-year appropriation for Medicaid. The 1988 appropriation request is for $28.1 billion. This includes $7.1 billion that has already been appropriated in advance for the first quarter of 1988; $30.9 billion is requested for 1989, and $8.5 billion is requested for the first quarter of 1990.

The fiscal year 1989 budget includes the impact of regulatory and administrative savings of $800 million. The legislative proposals we will send to Congress should save $1.3 billion in 1988 and $2.8 billion in 1989, and would lower the appropriations we have requested by these amounts. These proposals should give States the incentive to implement cost-efficiency measures and moderate program growth.

SUBSTANCE ABUSE

This year we launched a major new effort to combat the substance abuse problem in this country. It focuses on more effective prevention and treatment methods, and improved coordination with State and local officials and the media. The 1987 appropriation provided $252 million to carry out the Anti-Drug Abuse Act of 1986 and will be used to support research, prevention, and treatment in both 1987 and 1988. These moneys are intended to complement the $126 million in the National Institute for Drug Abuse and $82 million in the National Institute for Alcohol Abuse and Alcoholism for substance abuse research and about $250 million available for State substance abuse services under the block grants.

HEALTH PROFESSIONS

The 1988 budget requests $31 million for primary care in health professions education. We will emphasize programs to promote training in family medicine and geriatric health care. These two programs meet the needs of our expanding elderly population and will develop our capacity to care for people as outpatients rather than the more costly inpatient basis.

COMMUNITY SUPPORT PROGRAM

The budget also includes $20 million, an increase of $5 million over 1987, for demonstrations of community-based care targeted on the chronically medically ill who constitute a substantial portion of the homeless population.

IMMUNIZATION

We request $94 million for our Immunization Program, a $7 million increase over last year. I am happy to report that largely through the aggressive efforts of the Centers for Disease Control, national immunization levels have reached a new high of over 95 percent, and most childhood diseases are well under control.

Funds in the request are sufficient to purchase the same number of vaccines, 18.1 million doses, as were provided in 1987. The 1988 request includes $5.87 billion in obligated authority and $5.54 billion in budget authority for the National Institutes of Health, and $548 million for the Alcohol, Drug Abuse, and Mental Health Administration. These funds will continue support for basic biomedical and behavioral research, the development of scientists, and the administration of clinical applications that will be translated into future long-term improvements in medical care and the health of the American people.

RESEARCH PROJECTS

The principal element of the request is $3.1 billion for the support of over 19,000 research projects in NIH in both 1987 and 1988. While the 1987 appropriations provided a 17 percent increase in research funding

over 1986, such a large increase, especially in research project grants, cannot be sustained without significant displacement of other activities. Therefore, to maintain a balanced program, NIH proposes to extend the availability of $334 million of the increased 1987 appropriations and spend the funds in 1988. This approach will provide stable funding for research projects in both years at levels which are the highest ever achieved by NIH. We believe this is a prudent proposal which maintains a high level of research activity while minimizing current and future costs. Earlier you were informed that NIH had begun to implement an interim spending plan which limited the average increase for research projects grants to 5 percent over 1986. As of February 24, the limitation was lifted, and project grants are now receiving the full amounts anticipated under the appropriation.

Amended awards will be issued to all grantees whose awards were affected by the interim plan and whose projects merit additional support. Should the carryover proposal be accepted, only those awards made subsequent to congressional action would be reduced.

SOCIAL SERVICES ACTIVITIES

We are requesting $5.7 billion for the programs of the Office of Human Development Services. This agency supports State social services and related programs that assist a wide variety of vulnerable people to achieve self-sufficiency.

The 1988 budget includes a request of $2.2 billion for all the discretionary social services activities administered by the OHDS. While this generic or combined funding presentation does not separately identify funding for each program, as in the past, it is not a block grant consolidation proposal nor is it intended to change the operation of existing programs. We will continue operating these as federally administered programs. The purpose of the request is to focus resource allocation decisions on the overall goals of Federal policy rather than on specific programs.

CONCLUSION

The budget we submit to you reflects our best efforts to strike a balance between the needs of our citizens, fair payments for providers, and the demand for fiscal restraint. We want to provide the best possible services at the least possible cost for both beneficiaries and taxpayers.

No one knows better than you the difficulty in fairly resolving these competing demands, but we nonetheless believe that our 1988 budget proposals are fair, compassionate, and in accord with the deficit reduction goals set by Congress. I again look forward to working with the committee and will try to answer questions.

Senator CHILES. Thank you, doctor.

GAO REPORT ON SSA

Yesterday we received the GAO report which shows that the Social Security Administration is accumulating large amounts of unspent computer funds. Your own budget even requests supplemental bill language to transfer $18 million in excess computer funds to help offset the cost of the Federal pay raise. I would like to ask why you only recommended a transfer of $18 million and the unanticipated pay and retirement cost amounts to some $88 million.

Mr. McCANN. As you know, Commissioner Hardy has been in office for about 6 months. It is our feeling that she has made a commitment that she will be able to use those funds which have been accumulated over the last couple of years effectively to implement the system's modernization plan. We felt it appropriate to take the $18 million but no more to allow her the flexibility to implement that plan as quickly as possible.

SSA ADMINISTRATIVE COSTS

Senator CHILES. Well, we see that in that department they are going to cut administrative overhead costs by 47 percent and cut the staff by some 5,000 jobs. Basically that job cut is supposed to be on the basis of modernization.

Mr. McCANN. That is correct.

Senator CHILES. And yet we see how the modernization program is going, and it is way behind. Our concern is that you are cutting jobs but you have not been able to provide the modernization. To make a cut like 47 percent in overhead costs where you have literally got areas that are shipping supplies to each other by bus at the time that we are accumulating a $300 billion surplus makes no sense. We know we have to accumulate it, but is that not kind of foolish? What kind of service are you going to be able to give to our seniors who are out there if you are making those kinds of cuts?

Mr. McCANN. Sir, first of all the reduction in administrative costs is based on their 1987 appropriation level. The Congress chose to make some changes in the limitation account for Social Security in 1987. With respect to the FTE reductions, the Social Security Administration has, in fact, been running below its authorized FTE level for the last year or so. The second GAO report has confirmed our reports to you over the last year or so, that service is remaining high even with the lower FTE levels.

Senator CHILES. Well, it depends on how you want to read that report. I think they are showing that you have about the same waiting time. I do not know why somebody has to make an average of three telephone calls before they can get an answer. I do not know why 30 minutes should have to be a minimum waiting time, to tell you the truth. So I do not think it grades out as A or B. Maybe a C minus. But it seems to me we traditionally have run the system for less than 1 percent. Nobody is saying that we want to get fancy and start taking a lot of this money. But if you are squeezing, I do not know what kind of

morale you can have if you are cutting people's office supplies by 47 percent where they do not have the pamphlets and they have to contact somebody and say, would you put some pencils and erasers on a bus and send them over to us, and you are sitting with $300 billion. I do not think that is the way any of us would want our office run. We want to run it efficiently. We want a business, a regular business. I do not think we would run it that way.

Secretary BOWEN. I would like to reassure you that we certainly do not intend to reduce staffing levels at the expense of service to the beneficiaries. We operate around 1,400 in Social Security offices, and I am sure in that many offices there will be some evidence of problems. The overall efforts of the Department have been quite good.

SSA SERVICE

For example, Social Security cards are now issued within 11 days instead of the long 5 or 6 weeks as in the past. The system's modernization has reduced the field office computer response to under 3 seconds, getting immediate accurate computation. Also the waiting time in the office for any individual coming in for business has been reduced from 12 minutes to 9 minutes. There are going to be problems, but we are going to make every effort to be as efficient as possible. If we see we need more people we are going to ask for them.

Senator CHILES. Well, one of the things that the GAO report has shown us is that over the period of 6 years the office has asked for and been appropriated $601 million for systems modernization. Of that amount, $335 million has actually been spent and been obligated, and of that amount $147 million was actually obligated for provisions that were asked for. So that means, in effect, the other part of that $300 million and something was obligated for things that were not in the budget request.

Now, I ask this question sort of for the record, but I would like to know from your budget officers how is it that we had, and we have some evidence and we will give that to you, the same item being asked for time after time. But also the continuing request for additional funds when there is a larger carryover, and then we find that part of this money has been used for things for which there were no documents, no requests made, and we would like to have that information.

AIDS

The subcommittee heard testimony last week on the enormous health and financial risks that we face because of AIDS. For example, AIDS victims may reach 1 million by the year 2000, and the cost of health care for AIDS patients is expected to be between $8 and $16 billion in 1991. Last week we saw that the British Government has launched a $31 million public information campaign including leaflets to homes and daily TV and radio messages. All this for a country with a fraction of our population and only 686 diagnosed cases of AIDS.

By contrast, the Department's budget requests $16 million for AIDS information dissemination, $88 million for education activities. Do you think this request is sufficient especially, doctor, recognizing that right now education and prevention are our best attack against AIDS? We do not have a cure. We do not have a vaccine. We do not know when we are going to get one. Are we really—and we know we are trying to spend that money on research, and I compliment you on what is being done, but I wonder about our education effort.

AIDS EDUCATION

Secretary BOWEN. Well, I guess it depends on whom you talk to and whether there is enough being put forth in education. Obviously, education has to be our No. 1 method of trying to prevent the spread of AIDS until we find the means to stop the disease. The paper this morning had a survey concerning what people think about AIDS and how it is transmitted. I think that the educational efforts are beginning to pay off and pay off well. Of all the people surveyed, 95 percent knew how it is spread—that it is intravenous drug use and promiscuous sex. I think it was 55 percent or 45 percent felt that one could get AIDS even by donating blood. So we need to get more attention to that particular area.

We have increased that amount of funding for education considerably over the last few years—in 1986 it was just $32 million, and we are requesting $104 million for AIDS education in the next budget. We are about to release the education plan which will go to the general public, which will go to those most at risk, and that is the toughest area to reach, and go to those who are at risk in taking care of AIDS patients, meaning mainly the medical profession, and then a special education to those students of high school age and college age. We are going to target those four areas.

Our plan is now being reviewed by the Justice Department, OMB, and the Education Department. We anticipate clearance very soon, and we will be releasing that.

Senator CHILES. Well, we look forward to getting that as soon as we can. We would like to see some of these drafts that you have of it. Especially I am interested in how you are going to try to get to these high-risk groups such as the intravenous drug abusers.

Secretary BOWEN. That is the toughest part. The major portion of the expenditures will have to go to that particular area.

ANTIDRUG ABUSE INITIATIVE

Senator CHILES. The first hearing held by our subcommittee this year focused on funding for the antidrug abuse initiative. I think that underscored the importance that we ascribed to fighting this public health menace. I emphasized then and I want to emphasize now my profound concern over the administration's proposal to spread the antidrug funding over 2 fiscal years rather than one, which is contrary to Congress's intent. We are concerned that the President's rhetoric about a drug-free America rings hollow when you look at that 1988 budget request.

We just do not believe that there is any way that we should not be providing any additional drug treatment moneys in 1988, and I do not ask that in the form of a question.

Secretary BOWEN. Thank you.

PROMPT PAYMENT LEGISLATION

Senator CHILES. I spoke with you in January, Mr. Secretary, about the Department's intention for prompt payment legislation. At that time you said there would be no mandatory holding or delay of claims. In fact, you said you would notify us as rapidly as you could if the policy would change. We have not heard from you. Last week I asked Dr. Roper about the prompt payment of Medicare claims and he said there was not a planned slowdown in fiscal year 1987 but a continuation of the 1986 average payment time of 20 days.

I am still receiving at least 100 complaints a week from beneficiaries about the slow payment of claims, and I have heard now that the contractors assume a slowdown. I would like to ask, are you slowing down the average claim's processing time in fiscal year 1987?

Secretary BOWEN. The real complaints that you are getting are on the slow claims—that is, those that are paid between 90 and 120 days. I would like to go through the figures that I received yesterday on that. We are speeding up claims payments as rapidly as we can. Of all claims, 99 percent are paid in 90 days and 97 percent in 60 days. Ninety-five percent of the clean part A claims are paid within 30 days, and 79 percent of the clean part B claims are paid within 30 days.

PAYMENT OF CLAIMS

If we are paying 95 percent within 30 days the remaining 5 percent of the claims still represent a lot of people and, I suspect, is a source of considerable number of the letters. The reason for the 79 percent for part B claims is due to four contractors, out of 60, that have brought this average down. We are working now with them, and we would appreciate whatever help you can give on trying to winnow out these bad performers.

Interest is paid on clean claims beyond 30 days. The statute says that 95 percent of all clean claims are to be paid within 30 days. Our average is 14 days if you get it by dollar amount, and it is 18 days if you go by the number of claims. OMB says we have got to pay them on an average of 20 days. To get down to the 20 days we are going to need to pay the electronic claims a little bit slower—from 5 to 7 days. The electronic claims have been paid within 1 or 2 days. We can reduce the average to about 20 days by reducing the electronic claims payment time from 5 to 7 days.

Senator CHILES. Well, what Congress is intending, has intended very clearly is that we are setting a ceiling, we are not setting a floor. What the administration is doing is trying to set a floor and, in effect, to make the ceiling the floor. As you see, of course, next year, in 1988, the OMB letter says it wants you to go to 24 days. Now that is not the in-

tent of Congress. Not in any way. In fact, we want the claims paid as fast as they can be paid. We do not want anybody holding them back. We do not believe that we are not going to pay old people because if somebody does not pay the hardware store in 30 days that we are going to hold the claim and kite the money and not pay old people. That is not the intent of Congress. I do not know how we have to spell that out. I think we have tried to do that as much as we can in the administration, but we do not believe in building up a backlog or holding these claims back.

Secretary BOWEN. It is my impression, sir, the beneficiaries themselves, the old people are not the ones who are getting paid slower. The electronic claims that are paid to the providers of the care are being paid slower. With 95 percent of the clean claims being paid within the 30-day time, those 5 percent still represent a lot of people. I am sure there are letters coming in. If these are not clean claims, do not have all the proper information on it, then we have to make sure that we are paying the right people the right amount.

MEDICAL TREATMENT ON ASSIGNMENT

Senator CHILES. Again, doctor, when we are trying to encourage the medical profession to take assignment, to me you are working directly against that encouragement to take assignment when you are saying, all right, we are going to sit on those claims from doctors who take assignment. They are going to quit doing it. They are simply going to tell the beneficiary that they have got to pay.

Secretary BOWEN. To meet the deficit budget target there is a matter of hard choices.

Senator CHILES. Yes; I understand that, but I think the Congress is trying to say that those hard choices should not be made on the backs of——

Secretary BOWEN. We will obey that. This policy is a little shift from what I stated in December, and that is why I wanted to get it right out in front here today. At that time I stated if we found any need to change the timing that we would let you know.

Senator CHILES. This is a Department change in the electronic processing of claims, to delay those.

Secretary BOWEN. We are going to delay them from 1 or 2 days being paid now, to 5 to 7 days.

Senator CHILES. Again, as you know, doctor, we try to encourage these doctors. The whole thing was put in electronic processing. If you do that, you will get your money paid quickly. That was the whole inducement to try to get them to put that in, and now you are saying because you put that in we are going to stick you.

Secretary BOWEN. I want to clarify that beneficiaries are not paid by electronic claims. They are not going to be hurt by what we are doing.

Senator CHILES. They are hurt if a doctor refuses to take assignment. They are hurt if we do not encourage more doctors to put in electronic processing so that they simplify their procedure, and so they get rid of

their paperwork, because that is one of the reasons they do not want to take assignment to start with. So we are going against the motives which we set up to put in electronic assignment.

NIH CARRYOVER

Doctor, I have got a number of other questions. Senator Weicker wanted to try to come back. Mr. Secretary, as you know, the subcommittee is deeply concerned about your proposal to withhold $334 million of the 1987 appropriated NIH funds for obligation in the following year. I recognize the administration may disagree with the level of funding provided by Congress. But what leads you to believe that it is appropriate to reconsider that appropriation? Has there been some change in circumstances that were unforeseen at the time that Congress determined the 1987 appropriation that causes you to suggest a reduction in these funds?

Secretary BOWEN. Very little of our budget is discretionary, and when we have a target we have to meet we have some hard choices; this was one of the hard choices. There is no one who wants to retain the excellent amount and quality of research that NIH does any more than I. We have tried to come up with a plan which meets our bottom line and still would enable a higher level of research than we have ever had in the past, in spite of making the request for $334 million to be carried over. There are always workable alternatives and tradeoffs. I consider it a legislative right and duty to rearrange our priorities and administer the laws as passed.

HOMELESS

Senator CHILES. We know that the various programs administered by the Department may provide service to the homeless as part of the overall mission, their overall mission. We do not know how many homeless people are being reached in programs funded by State block grants. What HHS programs are specifically targeted to services for the homeless? What is their 1988 requested funding?

Secretary BOWEN. For the homeless, we have many programs providing services. The entitlement programs in HHS are Medicaid and Medicare, AFDC, Social Security disability insurance, and SSI. We have 600 community health centers with funding up to $400 million in 1988 in which they can receive medical services. ADAMHA, or Alcohol, Drug Abuse, and Mental Health Administration, community support program with $20 million, which is $5 million over the 1987 request. We have 285 runaway and homeless youth shelters. The social services block grant of $2.7 billion, ADAMHA's block grant of $495 million in 1988, the community services block grant of $310 million. Our Department is working with the interagency task force to coordinate the Federal resources available to the local public and private groups. For example, we have an outreach program through Social Security to issue Medicaid cards to the eligible people even though they do not have a permanent address.

We have established a homeless clearinghouse using $250,000 of our community services discretionary funds. The National Institute of Mental Health has a hotline for all of these mental health services. Our district office personnel are instructing groups aiding and representing the homeless to educate them on how to apply, assigning representative payees to handle the money for them, and also to have joint applications for SSI and food stamps. The Family Services Administration is modifying the regulations on outreach for AFDC but there are several agencies that deal with the homeless. We are also working with the Robert Wood Johnson Foundation. We have provided them with a $250,000 grant in nine cities to create a one-stop service provision center within a 5-year period of time to meet the needs of the mentally ill rather than having to go to various locations for assistance.

We are also providing $450,000 to assist the Robert Wood Johnson Foundation to study the health care needs of the homeless. I do not know how much money that totals.

Mr. BURKE. There is at least a 10 to 1 match. They are putting up at least $10 for every $1 of ours.

QUESTIONS SUBMITTED BY THE SUBCOMMITTEE

Senator CHILES. We had some other questions and Senator Weicker will not be able to get back. He had to go to a hearing, a confirmation hearing this morning, and asked to give his regrets for that. He wants to submit some questions for the record, and I will have some questions for the record, and we thank you.

We are going to take just a little break as the inspector general comes up here. I will be right back.

[A brief recess was taken.]

[The following questions were not asked at the hearing but were submitted to be answered for the record:]

Questions Submitted by the Subcommittee

Information Dissemination - AIDS

Question. By contrast, the Department's Budget Requests $16 million for AIDS Information Dissemination, and another $88 million for education activities. Do you think this request is sufficient, especially since prevention and education are our only weapons against AIDS until a treatment or cure is found?

Answer. The Public Health Service FY 1988 budget request for AIDS Information/Education funding is $103.9 million. We believe these funds are adequate to conduct a variety of efforts in AIDS Health Education/Risk Reduction and Public Information Dissemination. To provide a framework for these efforts, we issued on March 16th the Information/Education Plan to prevent and control AIDS in the United States. In FY 1988, the Public Health Service will spend three times more than was spent in 1986 on information/education, and $24 million more than we plan to spend this year. Moreover, it is expected that Federal efforts carried out in any given year for information/education activities will be multiplied many fold by the efforts of others.

AIDS Targeting

Question. What education efforts are you targeting towards the high-risk group, such as intravenous (IV) Drug Abusers, who are traditionally a difficult population to reach through the normal public health channels? Isn't the highest at-risk population the hardest to reach?

Answer. The Centers for Disease Control (CDC) initiated a program of Counseling and Testing Site (CTS) which began in April of 1985 as "Alternate Site Testing" with the purpose of protecting the Nation's blood supply. Concern that people at high risk for AIDS virus infection may donate blood to determine their antibody status prompted the establishment of "Alternate Testing Sites." The aim was to provide such persons a place to receive sensitive counseling and testing under the most discrete circumstances possible.

During calendar year 1985, 874 sites opened to test 79,083 persons. Of these, 17.3% were seropositive. The positivity rate in blood donation facilities was .4% for the same period. The 43-fold difference clearly demonstrates the wisdom of establishing the sites and the extent to which they accomplished their mission.

In 1986, PHS recommended that AIDS virus antibody testing be expanded to sexually transmitted disease clinics and other clinics serving high-risk populations. Although this made continuing use of the term, "Alternate Testing" site inappropriate, the need for continuing these

sites and the services they render to people at high risk was evident. Hence, the term "Counseling and Testing Sites" was adopted. Also, the first step was taken to integrate these facilities into community-wide programs of AIDS health education and risk reduction because CTS activities remain the core of efforts to provide AIDS prevention messages to those at high risk as individuals rather than just as members of groups or the general population. Provisional figures for calendar year 1986 indicate that over 121,000 people were tested and nearly 19% were found infected with the AIDS virus.

Initiated in 1986, nearly all of the 55 States and localities receiving cooperative agreements under the AIDS Health Education/Risk Reduction (HE/RR) program has begun activities to inform risk groups and the general public about the AIDS problem. These activities respond to public desire for information and lead in to the main thrust of the program which will mat4erialize during FY 1987.

The HE/RR program is designed to attack the AIDS problem, but first, that problem must be defined. Each area must determine its prevalence of HIV infection and of knowledge, attitudes, and behaviors among risk group and the general public. Therefore, aside from hiring staff, becoming organized, taking inventory of available AIDS-related services, and providing AIDS information of various types, HE/RR programs have been concentrating on conducting the sometimes difficult surveys needed to define the problem which they are going to address.

Once the baseline data are available and analyzed, each program will be establishing very specific and very measurable objectives, shaping plans to reach the objectives, and working with various community-based organizations to implement and evaluate a carefully targeted and comprehensive program initiative.

DRUG ABUSE FUNDING CUTS

Question. The first hearing held by our Subcommittee this year focused on funding for the anti-drug abuse initiative. This underscored the importance my colleagues and I ascribe to fighting this public health menace. I emphasized then and I want to emphasize now my profound concern over the Administration's proposal to spread the anti-drug funding over two fiscal years rather than one, as Congress intended. The President's rhetoric about a drug-free America rings hollow when you look at this FY 1988 budget request. Do you really believe that no additional drug treatment monies should be provided in 1988?

Answer. The funds provided for the ADAMHA portion of Administration's Anti-Drug Initiative represented a very significant increase over the 1986 base. In addition, the final appropriation of these increased funds was not made until the fiscal year had actually begun. In recognition of the above, the Congress made the new initiative funds available for two years to

assure that program quality could be maintained in the implementation of the initiative.

As we have begun to implement the program, we have found that the funds are directed to either entirely new programs or represent significant expansion of existing ones, often requiring completely new program announcements. Consequently, given the magnitude and the timing of the new initiative, we believe that effective program management dictates that we implement these activities over the new two years and that no new funds are necessary in 1988. Solving the drug abuse problem is not simply a matter of increasing appropriations. With this careful, responsible approach, we will be in a good position to propose for 1989 whatever new directions may be appropriate.

PROMPT PAYMENT

Mr. Secretary, in January, I spoke with you about the Department's intention on prompt pay legislation. At that time, you said there would be no mandatory holding or delay of claims. In fact, you said that you would notify us as rapidly as you could if the policy would change.

I have not heard of any change from you. Last week, I asked Dr. Roper about the prompt payment of Medicare claims. He said that there wasn't a planned slowdown in FY 1987, but a continuation of FY 1986 average payment time of 20 days.

Question. I'm still receiving 100 complaints a week from beneficiaries about the slow payment of claims. And, I've heard that the contractors budget assumes a slowdown. Are you or aren't you slowing down the average claims processing time in FY 1987?

Answer. The payment schedule for Medicare claims during FY 1987 is to pay "clean" claims within 30 days of receipt, and to allow Medicare contractors to pay claims faster than 30 days if possible within their operating budgets. This policy would result in a national average claims payment time approximating that which occurred in FY 1986, which was about 20 days. Through the first several months of this fiscal year, the average payment time has been somewhat faster than 20 days.

When I asked Dr. Roper his response to a January 28th letter from OMB outlining a policy of delaying claims in FY 1988 to no sooner than 24 days, he said that it was a "prudent way to make some economy in our budget."

Question. Why are you pursuing this policy when you have heard loudly and clearly from the Congress that we expect claims to be paid promptly? That we do not want any mandatory holding of claims for processing? That we expect claims to be paid in a timely manner consistent with historical levels?

Answer. For FY 1988, we are submitting a legislative proposal to continue the 30-day standard set for FY 1987 and establish a floor of 28 days. If our proposal is not enacted, then we will set

a floor of 24 days against the 26-day standard required by the Omnibus Budget Reconciliation Act of 1986.

CUTS IN AGING RESEARCH

Question. Mr. Secretary, I know you, as the policy official responsible for the Medicare and Medicaid programs, are keenly aware of the costs of long-term care for our aging citizens. With higher percentages of our total population moving into the over-65 age bracket in the coming years, the Nation's long-term health care bill wil skyrocket. It's critical that we do what we can now to prevent this drain on our resources by exploring the disorders that create a need for long-term care and by testing alternative forms of service delivery. Why, then, is the Department proposing to reduce research funding for Alzheimer's and related diseases and to cut Administration on Aging Research and Demonstration projects by half?

Answer. The 1988 budget for Alzheimer disease research at NIH and ADAMHA is $69 million, approximately the same level as 1987 and a 13% increase over the $61 million spent in 1986. The levels proposed for 1988 will continue to provide an opportunity for awards of new and competing grants of the highest quaility in this area.

Our proposed reduction in 1987 spending for AOA Aging Research and Demonstration projects was a one-time action to offset increased State prior-year claims for Foster Care reimbursements. With the $13 million remaining, the priority areas for Title IV Aging research in 1987 are: 1) Support for Families and Community-based Care; 2) Preparation for an Aging Society; 3) Foundation/HDS Partnerships; 4) Strengthening the Functioning of State and Locally Administered Social Services; 5) Improving the Management of Human Services; and 6) Education, Awareness and Training in Aging. In 1988, we would expect to obligate funds for this program at the historical appropriation level.

In addition, as mandated in the Omnibus Budget Reconciliation Act of 1986, HCFA is planning to begin the design, site selection, and award of up to ten Alzheimer Disease Demonstration Projects in 1988. HCFA expects to spend approximately $1.5 million from its Research appropriation over the duration of the projects and up to $40 million in benefits.

WELFARE WORK PLAN

Question. The press has reported that the President backs the Governor's welfare work plan, which would require AFDC recipients to participate in education, job training or placement programs.

Exactly what agreement has been reached on a new welfare work plan?

Answer. The President and the Governors agree on the need to reduce welfare dependency through work. The Governors, however, want the Federal Government to bear a disproportionate share of the costs.

Question. What is your response to the Governor's suggestion that the Federal government put up more than three-quarters of the estimated $1 billion annual cost?

Answer. If States pay 25 percent of the costs and reap half the benefit savings, they have little incentive to design efficient work and training programs. They would break even on programs that returned only $2 for each $4 spent. The Federal Government should not pay over 50 percent of the costs.

AIDS FUNDING - GENERAL PROVISIONS

Question. For fiscal year 1987, the Department is proposing general provision language to allow the Secretary to "Transfer up to $100 million from discretionary funds otherwise available in fiscal year 1987 . . ." to fund AIDS activities.

Dr. Bowen, is this the Department's way of requesting a $100 million supplemental for AIDS related activities?

Answer. This language is mainly a contingency measure. We have no AIDS supplemental budget request for the Public Health Service in fiscal year 1987.

Question. And again, in fiscal year 1988, the Department is requesting the same up-front transfer authority. Only this time, the Secretary may transfer up to three (3) percent of any discretionary funds available in fiscal year 1988. Based on last year's discretionary funding of $14.9 billion for the Department, that would be approximately $447 million.

Dr. Bowen, aren't you asking the Congress to yield its authority to set funding priorities to the Secretary?

Answer. We are asking for the flexibility to permit quick reaction to any new needs or opportunities which might arise during the course of the year concerning AIDS research, education, and prevention activities. Reliance on the formal budget supplemental process may result in delays in implementing new initiatives in this extremely crucial area. Finally, Congress would be notified 30 days in advance of any such transfer.

Question. Are you requesting an additional plus $400 million for AIDS related activities in fiscal year 1988?

Answer. We are requesting $533.5 million and the authority to transfer up to three (3) percent from any single discretionary activity, if an emergency occurs in the AIDS area.

Mr. Secretary, as you no doubt expected, the subcommittee is deeply concerned about your proposal to withhold $334 million of FY 1987 appropriated NIH funds for obligation in the following year.

Question. I recognize that the Administration may disagree with the level of funding provided by Congress, but what leads you to believe that it is appropriate to reconsider that appropriation?

Answer. We believed our proposal to extend the availability was appropriate. The proposal would have allowed PHS to fund the same number of research project grants which is about 19,000 in both Fiscal Year 1987 and 1988. This is the largest number of projects ever funded. Our proposal would have enabled PHS to maintain a balanced program and at the same time would have been responsive to the public demand for deficit control. This approach would have provided stable funding in both years at levels which would have been the highest ever achieved by NIH.

Question. Has there been some change in circumstances unforeseen at the time Congress determined the FY 87 appropriation that caused you to suggest a reduction in funds?

Answer. No. The PHS proposal to extend the availability of $334 million of FY 1987 fund was part of the Administration's policy to achieve long-term stability of Federal support for basic biomedical research.

FUNDING FOR HOMELESS

Question. We know that various programs administered by the Department may provide services to the homeless as part of their overall mission. But we don't know how many homeless people are being reached, especially in programs funded by the State block grants. What HHS programs are specifically targeted to services for the homeless and what is their FY 1988 requested funding?

Answer. State and local Governments are more aware of the specific needs of the homeless in their areas, and how severe those needs are compared to other needs. Targeting money for homeless at the Federal level is difficult since State and localities can: a) use more of the clock grant money for the homeless, or b) use earmarked appropriations to affect the cost of programs they would otherwise have funded with block grant money.

In addition to funds for programs in other Federal agencies, the Administration's Budget for Fiscal Year 1988 requests an additional $5 million for the Community Support Program (CSP) operated by the Alcohol, Drug Abuse, and Mental Health Administration (ADAMHA), for a total 1988 funding level of $20 million. CSP provides funds to States and localities for developing programs of community-based care for the chronically mentally ill, many of whom are homeless. The increased funding for CSP

will be used for demonstration projects targeted on mental health services for the homeless mentally ill.

The FY 1988 Budget also proposes $250,000 in Community Services Block Grant Discretionary Funds in each of fiscal years 1987 and 1988 to establish a clearinghouse on homeless issues in HHS. The clearinghouse will serve as the Federal focal point for information and technical assistance, helping States and communities develop strategies and package resources to help the homeless.

HHS is also increasing its outreach efforts to identify those homeless persons who may be eligible for entitlement programs such as Social Security benefits, Medicaid, and AFDC. These efforts are being made in conjunction with HHS actions to implement the Homeless Eligibility Clarification Act (Public Law 99-570), which prohibits the denial of benefits under these programs simply because a person does not have a permanent address.

Finally, the Federal Task Force on the Homeless will continue to coordinate Federal efforts to help the homeless, and will be funded at $325,000 for 1988. As the chair of the Task Force, HHS works closely with the vice-chair HUD and the 13 other Federal agency members.

Question. Is this Federal funding sufficient to address the needs we see across the country?

Answer. In addition to the above efforts specifically aimed at the homeless, the Task Force has identified over 70 existing Federal programs that can be used to help the homeless, 26 of them in HHS. A list of the HHS programs is attached, along with their 1988 budget levels. Many of these programs are block grants that can be used for a wide variety of purposes, including feeding and sheltering the homeless. The decisions on how to spend these funds are often the responsibility of the States and/or localities.

For this reason, we do not see a need for increased funding, but do see a need for better State targeting of available assistance to the needs of the homeless.

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
PROGRAMS TO HELP THE HOMELESS

OFFICE OF HUMAN DEVELOPMENT SERVICES (OHDS)

Older Americans Act (Title III, Section 303 as amended).

1988 REQUEST PROGRAM LEVEL - This program will be folded into the proposed Social Services Discretionary Program.

Under this legislation, funding is provided to State Agencies on Aging to initiate local community projects to provide social services to older persons. Assistance to the elderly homeless is an eligible activity. These services, which are carried out primarily through (local) area agencies on aging, provide numerous benefits. Among them are nutrition services to the elderly. These projects are designed to provide persons aged 60 and older with at least one hot nutritious meal five or more days a week. Most meals are served at congregate sites, although 28% are home delivered. During FY 1984, a total of 383,599,000 meals were served.

Runaway and Homeless Youth Program. (Runaway Youth: Title III, Part D, Section 341 of the Juvenile Justice and Delinquency Act of 1974 as amended).

1988 REQUEST PROGRAM LEVEL - This program will be olded into the proposed Social Services Discretionary Program

The purpose of the program is to provide financial assistance to establish and strengthen community-based centers designed to address the needs of runaway and homeless youth and their families. While most frequently thought of on a national scale, runaway and homeless youth remain largely a State and local program and should be treated first and primarily with State and local resources. Funding for fiscal year 1986 supported approximately 170 runaway and homeless youth projects as well as the national toll-free runaway youth hot-line.

OHDS Coordinated Discretionary Grants. (Section 426 other than subsection a, 1, C and 110 of the Social Security Act; the Child Abuse Prevention and Treatment Act other than section 4b; and Title II of P.L. 95-266).

These grants, awarded yearly, are intended to fund innovative approaches to meeting human service needs. It is possible that a private or public agency may apply for a grant to support a food or shelter program, if that is innovative and satisfies one of the priority areas in the Program Announcement. In FY 1986, two grants were made for projects to help homeless families.

Social Services Block Grant. (Title XX of the Social Security Act as amended by P.L. 97-35).

1988 REQUEST PROGRAM LEVEL - $2.7 billion
1988 PORTION TARGETED TO HOMELESS - Data not available, States determine amounts necessary

These block grants, awarded to the States, are designed to furnish a variety of social services best suited to the needs of individuals residing within a State. Emergency food and shelter may be among the programs conducted by each State.

FAMILY SUPPORT ADMINISTRATION (FSA)

Federal Task Force on the Homeless

1988 TOTAL PROGRAM LEVEL - $325,000
1988 PORTION TARGETED TO HOMELESS - $325,000

The task Force was established in October 1983 to coordinate Federal efforts to help the homeless. It is chaired by HHS, with HUD serving as its vice-chair, and includes 13 other Federal agencies as members: Agriculture, Commerce, Defense, Education, Energy, Interior, Labor, Transportation, ACTION, General Services Administration, Federal Emergency Management Agency, U.S. Postal Service, and Veterans Administration. The Task Force is charged with: (1) identifying existing federal programs that can be used to help the homeless; (2) identifying and removing red tape or other barriers to the use of these resources; (3) acting as an information source for Congress and the public; and (4) providing technical assistance to other levels of government and food and shelter providers.

Aid to Families with Dependent Children (AFDC)

1988 TOTAL PROGRAM LEVEL - $8.4 billion in benefits (Federal Share)
1988 PORTION TARGETED TO HOMELESS - Data not available, breakout not possible

Money payments are made directly to eligible needy families with dependent children to cover costs for food, shelter, clothing, and other items of daily living. The program requirements and benefits vary somewhat in each State. In general, the program covers single-parent families with children under the age of 18 whose father or mother has died or is continuously absent from the home, or two-parent families in which one of the parents is incapacitated. In addition, 26 States include two-parent families in which the principal earner is unemployed. The Federal government pays half of the State's administrative costs and from 50%-83% of benefits (averaging 54%).

AFDC Emergency Assistance Program

1988 REQUEST PROGRAM LEVEL - $99 million in benefits (Federal share)
1988 PORTION TARGETED TO HOMELESS - Data not available, breakout not possible

This program provides temporary financial assistance in the form of money or vendor payments to assist needy families with children in emergency or crisis situations to avoid destitution or to provide living arrangements. Some States use this program to provide temporary shelter to families that would be homeless otherwise. This is an optional State program in which the majority of States (including the District of Columbia) currently participate. The program is operated by the States, which have a great deal of flexibility in defining the emergency situations they will cover. The Federal government provides a 50% matching share.

Community Services Block Grant (CSBG) Program

1988 REQUEST PROGRAM LEVEL - $282 million
1988 PORTION TARGETED TO HOMELESS - $46.6 million in Emergency Services are estimated

The CSBG Program is a block grant program under which assistance is provided by a statutorily established formula to States and territories to help alleviate the causes of poverty. States and territories receiving CSBG funds are required to comply with a number of assurances designed to insure that the funds are used for the benefit of the low-income or poor as defined in the Federally established poverty income guidelines. State and local agencies have wide latitude in determining how to spend CSBG money. The States are required to provide a wide range of services and activities designed to assist low-income people in areas of employment, education, housing, and emergency assistance.

Community Services Discretionary Grants

1988 REQUEST PROGRAM LEVEL - $28 million
1988 PORTION TARGETED TO HOMELESS - Data not available, breakout not possible

This grant program provides funds to support program activities of national or regional significance to alleviate the causes of poverty in distressed communities. The grants, made at the discretion of the Secretary of HHS, may be made to public agencies and nonprofit organizations. The project must be targeted to address the needs of a specific segment of low-income people (i.e., urban poor, rural poor, migrants or seasonal farmworker). Special areas of focus are urban and rural economic development (including the establishment of full-time permanent jobs and ownership opportunities for low-income persons); rural housing repair and rehabilitation; rural water and waste water treatment repairs and rehabilitation; rural water and waste facilities; and improvements in the quality of life for migrants and seasonal farmworkers (including nutrition,

housing, and longer-term and more permanent employment).

Child Support Enforcement Program

1988 REQUEST PROGRAM LEVEL - $772 million (Federal Share)
1988 PORTION TARGETED TO HOMELESS - Data not available, breakout not possible

This program helps prevent homelessness. This program is a joint Federal/State/local effort to collect child support payments from parents who are legally obligated to pay. Its goals are threefold: to ensure that children are supported by their parents; to foster family responsibility; and to reduce the costs of welfare to the taxpayer. The enforcement program is operated by the States, usually through State and county Social Services Departments, but the major portion of the costs is covered by the Federal government. While the program may vary from State to State, it is available to all parents who need its services. All services are free to AFDC recipients, but a nominal charge may be made to others in some States. Among other actions, child support may be withheld from a parent's wages to some families to avoid homelessness or welfare dependency. In fiscal year 1986, $3.2 billion in child support payments were collected.

HEALTH CARE FINANCING ADMINISTRATION (HCFA)

Medicaid

1988 REQUEST PROGRAM LEVEL - $26.9 billion
1988 PORTION TARGETED TO HOMELESS - Data not available

Indigent people who are 65 years of age or older, or who are members of families with dependent children, or who physically or mentally disabled, or who are blind are eligible for Medicaid. In all States, persons on AFDC rolls are automatically eligible for Medicaid. In approximately 30 States, persons on SSI rolls are automatically eligible for Medicaid. Homeless persons, therefore, who are receiving SSI or AFDC benefits are automatically eligible for Medicaid benefits in the majority of States. Homeless persons who are not receiving SSI but are medically needy may qualify for Medicaid in 36 States, if they meet the income, age or disability requirements. Recent law prohibits the denial of benefits solely because a person does not have a permanent address.

Medicare

1988 REQUEST PROGRAM LEVEL - $81.9 billion
1988 PORTION TARGETED TO HOMELESS - Data not available

Medicare provides comprehensive health insurance protection to the aged, disabled and those suffering from chronic kidney disease, in the forms of hospital insurance and medical insurance. Medicare benefits are generally paid on a beneficiary's behalf to the person or organization that furnished the health care services.

Home and Community Based Services

1988 REQUEST PROGRAM LEVEL - $843 million (Federal share)
1988 PORTION TARGETED TO HOMELESS - Data not available

After obtaining a waiver from the Federal government, a State may provide nonmedical services in a home or community setting for persons who ordinarily qualify for Medicaid services. Examples of these services are respite care, rehabilitative services, and home health aid. Forty-two States currently participate in this program.

ALCOHOL, DRUG ABUSE, AND MENTAL HEALTH ADMINSTRATION (ADAMHA) OF THE PUBLIC HEALTH SERVICES.

ADAMHA is made up of three parts: the National Institute of Mental Health (NIMH), the National Institute on Drug Abuse (NIDA), and the National Institute on Alcohol Abuse and Alcoholism (NIAAA). Some of the major ADAMHA programs that can be used to help the homeless are summarized in the following pages. In addition, there are several smaller research, training or demonstration programs that may be useful.

ADAMHA Block Grants.

1988 REQUEST PROGRAM LEVEL - $495 million
1988 PORTION TARGETED TO HOMELESS - Data not available

These block grants can be used for alcohol and drug abuse programs and for mental health programs. The mental health funds are used mainly for Community Mental Health Centers (CMHC). CMHCs must provide the following services to be eligible for block grant funds:

- o outpatient services for the chronically mentally ill, children and the elderly;
- o 24-hour emergency care services;

- o day treatment of psycho-social rehabilitation services;
- o screening of patients for admission to State mental health facilities;
- o consultation and education services.

Program for the Homeless Mentally Ill.

1988 REQUEST PROGRAM LEVEL - $529 million for several research, training and demonstration programs
1988 PORTION TARGETED TO HOMELESS - $2.2 million administrative costs and homeless projects

The Program for the Homeless Mentally Ill coordinates ADAMHA research, training, and technical assistance initiatives pertaining to the homeless with serious alcohol, drug abuse, and mental health problems. The program achieves its objectives through ongoing NIMH, NIDA, and NIAAA programs. The program also works directly with national organizations.

Community Support Program (CSP).

1988 REQUEST PROGRAM LEVEL - $20 million
1988 PORTION ALLOCATED TO HOMELESS - $5 million

CSP assists States and localities in developing comprehensive Community Support Systems to stimulate improved Community-based Care for the chronically mentally ill. The program is designed to avert homelessness among the population. Additionally, in FY 1983 money was set aside to study the demographics and characteristics of the homeless mentally ill. In FY 1986, grants were made to develop innovative city-based demonstrations of service delivery to the homeless mentally ill. Grants are made to State mental health authorities, who often subcontract with local governments.

Center for State Human Resource Development.

1988 REQUEST PROGRAM LEVEL - $7 million
1988 PORTION TARGETED TO HOMELESS - Data not available

The Center provides grant funds to State Departments of Mental Health to develop their capacity to conduct systematic human resources development activities and to develop and implement demonstration programs to address human resource development issues including but not limited to: planning and evaluation; workforce management (i.e. recruitment, selection, distribution, utilization, redevelopment, retraining, and education); and training (i.e., curriculum development for target priority populations like the homeless and

implementation of short-term skills development, continuing education, etc.).

State Comprehensive Mental Health Services Planning

1988 TOTAL PROGRAM LEVEL - $10 million
1988 PORTION TARGETED TO HOMELESS - Data not available

This program was signed into law in November 1986 (Public Law 99-660). It requires States to develop and implement comprehensive community-based programs to meet the full range of needs faced by the chronically mentally ill, many of whom are homeless. States are required to develop a State plan in consultation with the mental health community by 1991, or lose a portion of its ADAMHA block grant funds. The State plan must include, among others, provision for: (1) case management services; (2) actions to reduce hospitalization rates; (3) rehabilitation, employment, housing, and medical services; and (4) outreach programs and services for the homeless mentally ill. By November 1987, HHS is required to develop and make available a model plan for a community-based system of care.

HEALTH RESOURCES AND SERVICES ADMINISTRATION (HRSA) OF THE PUBLIC HEALTH SERVICE

Maternal & Child Health Services & Primary Care Block Grant (MCH).

1988 REQUEST PROGRAM LEVEL - $478 million
1988 PORTION TARGETED TO HOMELESS - Data not available

MCH Block Grant funds are allocated by formula to State health authorities. Since the State programs have an orientation toward high-risk persons, and the homeless may be so described, it is likely that State programs provide services to this segment of the population. However, a survey of 1982, 1983, and 1984 State applications revealed no specific data relating to the homeless. States must apply for block grant funds annually. State health agencies are required to operate the block. States must prepare a report to the Secretary of HHS describing intended use of funds plus a description of their compliance with eight assurances of quality, fairness and appropriateness of expenditures. They must also prepare annual post-expenditure reports on how funding was used. States must match every four Federal dollars with three State dollars for the MCH Block grant.

Community Health Center (CHC).

1988 REQUEST PROGRAM LEVEL - $400 million
1988 PORTION TARGETED TO HOMELESS - Data not available

Community Health Centers (CHCs) provide health services to medically underserved populations in both urban and rural areas. In FY 1984, nearly 600 community health centers provided services to approximately 4.7 million people. CHCs are required to provide services regardless of an individual's ability to pay. Since many of the nation's homeless may be located in medically underserved areas where CHCs are situated, it is expected that a large number of them may be making use of these resources. Proposals must be designed to improve availability, accessibility and organization of health care within medically underserved communities. Services should be consistent with plans of local Health Systems Agencies and State Health Planning and Resources Development Agencies. A needs/demand assessment is required. The applicant must assume part of the project costs, determined on a case by case basis.

Migrant Health Program.

1988 REQUEST PROGRAM LEVEL - $45 million
1988 PORTION TARGETED TO HOMELESS - Data not available

The Migrant Health Program is a discretionary grant program which awards funds to support the development and operation of migrant health centers and projects which provide primary ambulatory and inpatient health services, supplemental health services, and environmental health services for migrant and seasonal agricultural farm workers and their families as they move and work. Migrant Health "centers" must serve a "high impact area" (not less than 4,000 migratory agricultural workers and seasonal workers for more than two months in any calender year). Migrant health "programs" may be in areas where there is no migrant health center and in which not more than 4,000 migratory agricultural workers and their families reside for more than two months.

National Health Service Corps

1988 REQUEST PROGRAM LEVEL - $43 million
1988 PORTION TARGETED TO HOMELESS - Data not available

The National Health Service Corps provides loans to communities and to medical practitioners to assist in establishing and maintaining health care services in Health Manpower Shortage Areas. They are required to provide services to all without regard to ability

to pay. These health personnel may be an important resource in meeting health care needs of the homeless. Communities may apply for designation as a Health Manpower Shortage Area and assignment of Corps personnel. Designation and assignment, however, are at the discretion of the Secretary. There are no set funding matching requirements. The Government pays medical, dental and other health personnel while the community usually provides a medical facility, support personnel, and assumes responsibility for managing the practice.

SOCIAL SECURITY ADMINISTRATION (SSA)

SSA Outreach

SSA has undertaken a nationwide effort to identify and help serve those many hard-to-reach homeless people who may be entitled to Supplemental Security Income (SSI), or Social Security Retirement, Survivors, or Disability Insurance (SSDI) benefits. SSA field offices maintain current information about providers of services to the homeless. They establish and maintain liaison with service providers to ensure that program information is available to providers' staffs, and request the providers' assistance in identifying homeless people who may be eligible for benefits. In some cases, especially in areas with large homeless populations, this may involve taking claims at the facilities (such as shelters and soup kitchens) that provide services for the homeless.

A fixed address is not required in order to receive Social Security benefits. Consequently, homeless persons who meet the other program requirements may qualify for various benefits. Once a homeless person's eligibility for payments is established, the Social Security office can make special arrangements for delivering checks and notices. Checks and notices can be delivered to a shelter or other third party address, or even to the Social Security office, if necessary. In cases where a person is incapable of handling his or her own money because of an impairment, for example - SSA can appoint a representative payee to receive checks and notices on his or her behalf. A shelter or other organization can serve as the payee, if there are no relatives or friends who can do so.

Social Security Retirement & Survivors Insurance Benefits (RSI)

1988 REQUEST PROGRAM LEVEL - $193 billion (Paid directly to retirees and their dependents and survivors
1988 PORTION TARGETED TO HOMELESS - Data not available

RSI benefits are payable to:

- Retirees at age 62;
- Dependents of retirees (wives, husbands, children age 16 and under, and older children if disabled before age 22);
- Survivors (widows/widowers at age 60 or at age 50 if disabled, children age 16 and under, and older children if disabled before age 22).

Supplemental Security Income (SSI)

1988 REQUEST PROGRAM LEVEL - $12.3 billion (Paid directly to individuals)
1988 PORTION TARGETED TO HOMELESS - Data not available

The SSI program makes monthly payments to people who are 65 or older, disabled, or blind and have little or no income and assets. Most States supplement the Federal SSI payments and provide Medicaid. States also may offer a variety of social services. Also, under a 1983 change in the law, some people who are residents of public emergency shelters can now receive SSI payments for up to 3 months during any 12-month period. Prior to the change, people who lived in public emergency shelters were not eligible for SSI. Eligible persons who live in private shelters are not subject to this 3-month limit, but may draw benefits 12 months of the year.

Social Security Disability Insurance (SSDI)

1988 REQUEST PROGRAM LEVEL - $20.7 billion (Paid directly to people and their families)
1988 PORTION TARGETED TO HOMELESS - Data not available

The SSDI program pays monthly disability benefits to disabled workers under age 65 and their families. Disabled workers must have worked long enough and recently enough under Social Security to be insured under this program. The work requirement varies depending on the age of the worker. Under Social Security, you're considered disabled if you have a severe physical or mental condition which:

1. Prevents you from working and
2. Is expected to last (or has lasted) for at least 12 months, or is expected to result in death.

SSDI checks can start for the sixth full month of a disability. Once checks start, they will continue as long as the person is disabled and unable to perform substantial gainful work. Cases are reviewed periodically to make sure the person remains disabled.

SERVICES FOR REFUGEES

Question. There are a few States, Florida among them, that have been especially heavily impacted by large refugee populations. These States depend heavily on the funds available for assistance to refugees trying to assimilate into their new surroundings. The Administration's budget proposes to cut back these funds substantially through reduction in the time period of assistance and elimination of the targeted assistance program.

Why should the States bear the burden of providing services to persons admitted through Federal policy?

Answer. The budget request for FY 1988 proposes to adjust the period of Federal subsidy of the normal State share to the States for cash and medical assistance provided to refugees from the current 31 months from a refugee's date of arrival in the United States to 24 months.

We believe it is prudent to adjust the amount of subsidies for cash and medical assistance for the following reasons:

-- This action will provide States a strong incentive to take early actions to move refugees towards self-sufficiency; and

-- Both the States and the Federal Government must share costs to help meet the objectives of the Balanced Budget and Emergency Deficit Control Act of 1985.

Several years have passed since the U.S. received large numbers of refugees and entrants. The Federal Government has provided funds to offset the impact of those refugees and entrants and that targeted assistance subsidies can no longer be justified. Of course, regular social services funding will be continued.

Although intended to be temporary, the targeted assistance program has been funded at artificially high levels since fiscal year 1982, when it was created in response to the large numbers of Cuban and Haitian entrants who arrived during fiscal years 1980 and 1981.

Refugee arrivals have fallen sharply in the ensuing years, however. As a result, the existing funding is sufficient to continue most targeted assistance projects through at least March 31, 1988. Since its inception, the targeted assistance program has provided $291,850,000 to 20 States with impacted counties.

During the five-year period ending September 30, 1986, Florida received approximately 9,400 refugees and Cuban and Haitian entrants, who comprised about 2.8% of the national total of arrivals during this period.

IMMUNIZATION GRANTS

Question. We are pleased that the Department's budget requests enough funding to purchase the same number of vaccine doses as were provided in 1987. However, I understand that the request does not include any funding for State administrative costs associated with the immunization program.

Isn't it logical to assume that some States will cut back their immunization efforts, perhaps substantially, because they can't afford to absorb this administrative cut?

Answer. Within the $80.9 million requested for Immunization grants to States for 1988, we currently estimate that between $3.3 million and $11.3 million would be available to support State administrative costs for the immunization program, depending on the final prices of CDC's consolidated vaccine purchase contracts for 1987 and 1988. While this is a decrease from the $17.9 million likely to be used by the States for administrative support costs in 1987, we believe that the States, as partners with us in this effort, recognize the importance of childhood immunizations and, where necessary, will seek to augment expenditures for State program administration costs. To ease the States' ability to do this, CDC is revising its program guidelines that currently prohibit States from assessing nominal fees to parents whose children receive vaccines in the public sector. However, no child should be refused an immunization because of inability to pay, and CDC will be monitoring this situation.

"GENERIC" SOCIAL SERVICES REQUEST

Question. The Human Development Services budget includes a $2.2 billion request for a "generic" social services appropriation covering 26 programs, with funding $70 million below the FY 1987 level. Since each of the 26 programs would retain its structure, is not the only purpose of this proposal to persuade Congress to abandon its appropriating responsibility and trust the Department to distribute a $70 million funding cut?

Answer. The purpose of this proposal is not to "persuade the Congress to abandon its appropriating responsibility" but rather to focus the decision-making process on a total social services policy instead of on categorical program areas.

MENTAL HEALTH RESEARCH CUTS

Question. Last week, Department witnesses testified before our Subcommittee about the prevalence of mental illness in this country and the promised advances being made by Federally-supported researchers. One statistic they quoted made a

particularly strong impression on me -- that one of five Americans suffers from a diagnosable mental illness during a six month period. If mental illness threaten so many Americans, how can you justify a six percent reduction in resources for the valuable research being conducted by the National Institute of Mental Health?

Answer. We believe that the research budget provided for NIMH is sufficient to maintain the progress being made by Federal-supported researchers. While there is a small percentage decrease from last year, this is more a function of the substantial 21% increase appropriated for NIMH research in 1987. From 1986 to 1988 the NIMH research budget increases in total by 14%. We believe this upward trend in a period of very limited new resources is a indication of the importance placed on mental health research.

PROTECTION AND ADVOCACY GRANTS FOR THE MENTALLY ILL

Question. I was surprised to learn that your budget requests a reprogramming of one-third of FY 87 funds for protection and advocacy programs for the mentally ill in order to fund Federal employees' salaries. Your FY 88 request continues this one-third funding reduction. I assume that you are not contending that the need for these services has decreased or that States are now more able to provide them with their own funds. How, then, do you justify a cut of this magnitude?

Answer. While this program has merit, we do not believe its conduct should be a continuous responsibility of the Federal government. We would expect that, with the initial funds we have been able to allow, the various States will be able to establish a locus for this effort and will continue it with existing resources as Federal support phases out, if it has proven beneficial. Block grant funds, for example, could be used to support this program.

HEALTH PROFESSIONS

Question. Mr. Secretary, in your written remarks, you state that the budget requests for the education of health professionals are focused on the care of the expanding elderly population and on the capacity to care for people as outpatients.

I am not sure that your sentiments are reflected in your funding requests. How do you justify a 60 percent cut in geriatric training, or a 40 percent cut in family medicine training, or a zero funding request for advanced degree nurse training?

Answer. While we recognize that these activities have made important contributions to education and training of health professionals, in view of the continuing increases in the overall numbers of health professionals and the traditional primary responsibility of the States and the private sector in thee areas, we believe continued Federal support is not warranted--except for the highest priority activities of family medicine and geriatrics. Our FY 1988 budget reflects this belief.

WIN FUNDING

Question. Congress reduced appropriations for the Work Incentive Program (WIN) to $103 million in fiscal 1987, compared to $203 million in fiscal 1986 -- but specified the money was to be used in the first 9 months in anticipation of a new work and welfare program to replace WIN.

If Congress does not enact a successor to the WIN program by July, when the current WIN appropriation is due to expire, will you request a supplemental appropriation for WIN?

Answer. No. The Administration opposes supplemental funding for WIN. Congress has clearly indicated its intent to replace WIN with a more effective approach, and is currently considering comprehensive welfare reform legislation, including the Administration's GROW (Greater Opportunities through Work) proposal. Until Congress passes legislation to replace WIN, State can continue to provide work-related services in fiscal year 1987 by using unspent WIN balances (estimated at $25 million as of June 30, 1987), relying on work activities authorized under Title IV-A of the Social Security Act for which unlimited funding is available at a 50 percent matching rate, or through increased coordination with the training programs operated under the $1.8 billion Job Training Partnership Act block grant. supplemental funds unnecessary at that time.

Question. What will be the impact of shutting down the WIN program before a replacement program is ready to pick up the slack?

Answer. The WIN program will not shut down June 30. States can continue services with the $25 million in unspent balances we estimate they will have June 30. States can also rely on work activities authorized under Title IV-A of the Social Security Act, for which unlimited funding is available at a 50 percent matching rate, or increase coordination with the training programs operated under the $1.8 billion Job Training Partnership Act block grant.

Question. How many welfare clients would have to be terminated?

Answer. No AFDC clients need be terminated. Until Congress passes legislation to replace WIN, States can continue to provide work-related services in fiscal year 1987 by using unspent WIN balance (estimated at $25 million as of June 30, 1987), relying on work activities authorized under Title IV-A of the Social Security Act, for which unlimited funding is available at a 50 percent matching rate, or

through increased coordination with the training programs operated under the $1.8 billion Job Training Partnership Act block grant.

TRAINING COSTS UNDER GROW

Question. Your proposal to replace the Work Incentive Program (WIN) with the Greater Opportunities through Work (GROW) Program would appear to more than triple Florida's AFDC caseload requiring employment and training services. But as I understand it, the States would have to pay the training costs.

To what extent can States be expected to bear the job training costs for welfare clients?

(Background: Florida estimates the GROW program would require employment and training services for 70,000 AFDC recipients, compared to the current level of 20,000. Assuming an average cost of $5,800 per trainee (the experience under the Job Training Partnership Act), this would cost $290 million in Florida alone.)

Answer. We expect States to meet their early year targets by encouraging children and young mothers to stay in high school. In later years, costs will be more than offset by benefits savings, it makes sense for them to pay half the costs. States have the option of using a mix or programs designed to keep costs manageable while providing good services. The Manpower Demonstration Research Corporation (MDDRC) studies have shown that programs costing as little as $600 per person can effectively reduce dependency. For most expenditures under the GROW program, States will bear only 50 percent of the costs. Federal matching funds at a 50 percent level will be provided to help States meet the costs of operating GROW and providing necessary supportive services, such as child care and transportation. Unlike the WIN program, these funds will be available on an open-ended basis.

Matchable costs under GROW include costs of operating job search and placement programs, work experience programs, and work supplementation, or grant diversion, programs; general administrative costs such as costs of assignments and referrals, costs of monitoring and recordkeeping, and program staffing; and costs of necessary supportive services for any GROW participant.

The only expenditures for which Federal matching funds are not available under GROW are the direct costs of providing education and training. Federal funds for training are provided under the Job Training Partnership Act (JTPA); and we anticipate increased services for AFDC recipients. Also, the Administration is proposing substantial increases in

LONG TERM CATASTROPHIC HEALTH

Question. Mr. Secretary, much to your credit, you have proposed, and the President has endorsed, a catastrophic health plan for acute hospital care. However, many of us are concerned about long-term care outside the hospital, that is, nursing home care and care in the home. Our caution in addressing this issue is trying to figure out how we will pay for nursing home and at-home care. Policy makers need to know more about the delivery, effectiveness and costs of health care services in these settings. We need to find out what works and what doesn't.

The FY 1988 budget request for health services research and technology assessment is approximately the same as last year's appropriation of $17.3 million. Do you think the request is adequate to carry out this research? Are we moving in an effective direction in researching the delivery and costs of long-term home care?

Answer. The FY 1988 budget request for health services research and technology assessment is adequate to carry out research on long-term care outside the hospital.

With respect to the direction of these research efforts, we are working towards that end in partnership with the public and private sectors. Our belief is that this must be a shared effort.

NCHSR has designed the 1987 National Medical Expenditure Survey (NMES) so that estimates of the impact of both acute and long-term catastrophic illness can be readily made. For the first time, this national survey includes a sizable sample of nursing home patients and the household survey of the civilian, non-institutionalized population has been structured to include significant numbers of persons most likely to incur a catastrophic episode in 1987.

Data will be obtained on charges and sources of payment for both formal and informal caregivers and on health status and functional limitations of the long-term care population residing in the community. From the survey of 13,000 residents of long-term care institutions, data will be obtained on: health and functional status; 1987 institutional charges and sources of payment; expenditures and sources of payment for care provided by physicians, acute hospitals, and other noninstitutional providers; and length of stay.

Private financing mechanisms to relieve the catastrophic burden of long-term care have also been an important focus of NCHSR's research program. In particular,NCHSR has and continues to be a primary source of data and analysis necessary for the development of long-term care insurance strategies.

A recently completed NCHSR research experiment, conducted in San Diego, tested the effectiveness of case-mix incentive payments to encourage more appropriate use of nursing homes,

better outcomes in nursing home patients, and reductions in hospital backup.

NCHSR conducts research on health, social, and residential services for physically and mentally impaired elderly. Relevant completed and ongoing research in this area includes:

Analysis of the characteristics of informal caregivers of the disabled elderly residing in the community and the level of caregiver burden.

Analysis of informal caregiver attitudes toward institutionalization of the elderly persons.

Analyses of the relationship between the burden of caregiving and the employment of informal caregivers.

Evaluations of 16 demonstration projects, funded through waivers of Medicaid and Medicare regulations, to provide community-based services.

Grant and contract research supported through NCHSR's extramural research program has dealt with a number of issues relating to health care for the elderly. Some examples of the specific findings of this research include:

An effective strategy to offset the severe economic costs of acute catastrophic illness for elderly Medicare beneficiaries involves the establishment of a ceiling on out-of-pocket expenses for covered services paid for by a relatively small increase in premium.

A new team approach to health care for the homebound, chronically ill elderly provides effective and less costly care to the terminally ill.

INFANT MORTALITY

Question. Several programs within your department address the issue of infant mortality. Health services are delivered through the Maternal and Child Health Care Block Grant, community health centers, the Preventive Health Services Block Grant, and the Medicaid program. Research and studies are conducted through the National Institutes of Health, The Centers for Disease Control, and the Alcohol, Drug Abuse and Mental Health Administration.

Who is responsible for coordinating these activities? How are the various programs evaluated?

Answer. The Public Health Service (PHS) has established a number of coordinating mechanisms to maximize efficiency and minimize redundancy relating to infant mortality and other maternal and child health programs. The first is the PHS Low Birthweight Prevention Work Group. This group is comprised of representatives and experts in maternal and infant health from the Health Resources and Services Administration (HRSA), National Institutes of Health (NIH), National Center for Health Statistics (NCHS), Centers for Disease Control (CDC), Alcohol, Drug Abuse and Mental Health Administration (ADAMHA), Food and Drug Administration (FDA), Office

of Population Affairs, Office of Minority Health, Office of the Assistant Secretary for Health (OASH), and the Health Care Financing Administration (HCFA). The Work Group is co-chaired by the Director of the Division of Maternal and Child Health (DMCH) and the Director of the National Institute of Child Health and Human Development (NICHD). This group is charged with the broad responsibility for coordinating infant mortality and low birthweight prevention activities, providing scientific analysis and identifying policy issues of priority. The Work Group meets regularly to share ideas and program information and to develop joint activities relating to low birthweight prevention and infant mortality reduction.

A second coordinating mechanism focuses around the Objectives for the Nation. For each priority area, such as Pregnancy and Infant Health (PIH), a lead agency and HHS cooperating agencies are identified. As part of the Mid-Course Review of the 1990 Objectives, these cooperating agencies examined each objective (including the objective promoting early registration for prenatal care) to assess progress, identify factors enhancing or impeding progress and determine measures to overcome problems. A publication of the findings and recommendations was just released. The agencies involved include: Health Care Financing Administration; Health Resources and Services Administration (Indian Health Service and Division of Maternal and Child Health); National Institutes of Health; Centers for Disease Control; Alcohol, Drug Abuse and Mental Health Administration; and Office of the Assistant Secretary for Health (National Center for Health Statistics, Office of Population Affairs, National Center for Health Services Research and Office of Public Affairs).

Question. In addition, there are programs outside of your department, such as the Women and Infants Nutrition program in the Department of Agriculture. Do you coordinate any of your programs with the Department of Agriculture?

Answer. Historically, there has been on-going coordination between several HHS programs and USDA programs that affect mothers, infants, children and families. Coordination activities with the WIC program have included: pre-WIC activities related to design of a supplemental food program to support maternity and infant care projects and State programs; the establishment of a collaborative basis for on-going mutual support; design of food packages (WIC); participation on national advisory committees; interagency agreement on development of Regional office support systems USDA/PHS; and attendance and participation in continuing education workshops and conferences relating to efforts to enhance knowledge, networking, and improved implementation plans for prenatal and child health services. Recent workshops have included: "Issues in Perinatal Nutrition: for health care providers in Regions VIII, IX, and X, and "Nutrition for Pregnancy, Lactation and Infancy: in Regions IV, V, and VI; "A Right to Grow, Region I,; Perinatal Nutrition, Region II, and Region IV - Southeastern Conference of all States and related agencies to focus on nutrition services needs. The intent is to strengthen collaborative efforts, knowledge, and networking to improve services.

In the area on Nutrition Education - The joint USDA/DHHS Committee for Maternal and Child Nutrition Publications (Extension, WIC, Headstart, NICHD, DMCH, IHS) meets regularly to coordinate and

collaborate on publications needed to enhance nutrition priorities which include emphasis on nutritional needs of pregnant teenagers to promote early entrance into prenatal care, and good counseling. Food for the Teenager During and After Pregnancy - a join publication - USDHHS/USDA/March of Dimes Birth Defect Foundation has been distributed (130,000) at State/local levels. Over 25,000 "Working With the Pregnant Teenager" education packets for professionals including guides for nutrition educators, outreach suggestions, and posters have been made available to health care providers in a collaborative effort by the 3 agencies since 1982. Another joint DHHS/USDA publication which emanated from the Joint Committee is Cross-Cultural Counseling: A Guide for Nutrition and Health Counselors. Health educators are increasingly required to assist people with cultural backgrounds that are different from their own. This guide focuses on serving Asian and Pacific, Black, Hispanic, and Native American cultures. Technical References: The references, Nutrition Services in Perinatal Care and Alternative Dietary Practices and Nutritional Abuses in Pregnancy, developed by the National Academy of Sciences with funding from DMCH, continue to serve as valuable resources for professionals and agencies. A new professional reference, Nutrition and Adolescent Pregnancy: A Selected Annotated Bibliography, was developed jointly by DHHS, USDA, and the March of Dimes. Intended for health professionals and nutrition educators in States and local MCH, WIC and Cooperative Extension programs, this resource contains key technical references as well as nutrition education materials for use with pregnant adolescents.

Extension Service USDA provides for local/regional resources in coordination of care. For example, cooperation is ongoing in many State/local prenatal clinics to provide for home followup and assistance in referral to early prenatal care for low income populations. This is particularly true at the county level.

Increasing efforts on data collection as a basis for planning nutrition and health services especially as related to Healthy People, - Objectives for the Nation - which includes emphasis on prevention of low birthweight babies has resulted in several collaborative efforts among agencies and States. For example: a recent National Conference on Data - Objectives for the Nation - included several key Federal data systems experts from NCHS, CDC, USDA to examine systems from several State-based clinic programs including DMCH, WIC, EPSDT, CHC, Migrant lead screening, and other child health programs. Prenatal weight gain trends and birthweights are reflected in these low income populations which lead to improved program services evaluation and interventions. A recent publication - Improving MCH/WIC Coordination - August 1986 was funded by DHHS and participated in by USDA WIC. Areas for future coordination are discussed in this publication.

The WIC program and other child nutrition programs are integrated into clinical sites at Community Health Centers, Migrant Services, State Child Health and Prenatal Services, which includes DMCH supported systems. Services on either site or referral systems are in place from these related programs to maximize care and resources.

Question. Last year, I sponsored legislation, that was signed into law, to create a Commission that would make recommendations for a national policy plan to reduce and prevent infant mortality.

Mr. Secretary, I'd like to have your comments and suggestions for particular problems that the Commission should address, especially regarding the coordination of programs within the Department.

Answer. Key areas of concern always have been the coordinated of delivery and payment for effective perinatal care for mothers and infants. The broad population group at highest risk of infant and maternal mortality and morbidity is, of course, the poor and particularly, the Black poor. As you know, we have proposed in our 1988 Budget an $85 million initiative in which we hope to demonstrate the health effectiveness and cost efficiency of case-managed perinatal care to Medicaid eligible women and their infants. We are most hopeful that this demonstration will verify effective approaches to the low-weight birth and infant mortality problems. This initiative has been developed jointly by the Public Health Service and the Health Care Financing Administration. I am pleased to say that we have seen very effective coordination at the Federal level in the development of this proposal; and, I expect that it will continue in the extensive cooperative efforts which will be required during the implementation and assessment phases. Most vital, however, will be the long-term coordination and cooperation which will have to be demonstrated at the State level between State Medicaid and health authorities, and among local medical and other health professional groups, hospitals, local Medicaid agencies, health departments, social service agencies, voluntary groups, churches and the like. Help from the Commission in fostering and assessing coordination and cooperation -- particularly at the State and local levels -- would be most welcome.

MEDICAID CAP - IMPACT ON FLORIDA ELDERLY AND DISABLED

Once again, the President's budget proposes restraining growth in the Medicaid program through the imposition of a cap on Federal allocations to the States.

For rapidly growing States like Florida - where the most growth is in the elderly population - the loss of the Federal share of the Medicaid entitlement funds would have a disastrous impact on the State budget. Florida estimates a loss of $119.5 million in FY 88 and well over $20 million in FY 89 should the President's proposal be enacted. In Florida, as in many states, almost half of the Medicaid budget provides long term custodial care for the elderly and disabled.

Question. How will States, like Florida, be able to provide essential long-term care for the elderly and disabled?

Answer. In 1988, Federal medical assistance payment will be reduced by $1 billion. States can meet this limit while continuing to provide essential care by implementing a wide range of cost containment measures:

- Home and community-based waivers - This program allows Medicaid to pay for less costly home care instead of institutionalization. (As of December 31, 159 waivers have been approved in 46 States.)

- Freedom-of-choice-waivers - This program allows States to implement innovative systems, such as competitive bidding and case management. California's competitive contracting program for hospitals will save over $200 million annually. (83 waivers have been approved in 20 States.)

- Additional cost containment measures:

  -- Greater use of ambulatory surgery
  -- Increased enrollment in HMOs

- Greater accuracy in eligibility determinations - Because of Medicaid eligibility quality control error rates, States waste approximately $450 million annually in erroneous Federal expenditures.

- Alternative nursing home reimbursement methodologies - A GAO report found several problems in State reimbursement rate methodologies, such as base costs that were too high and use of inaccurate inflation indices.

Greater use of thse types of cost containment measures will help States meet the cost limitation in 1988.

In addition, a $300 million "hardship" fund is provided in 1988 for States exceeding their limit. This fund will facilitate the transition to a capped program and will be available to States experiencing undue hardship.

MEDICAP CAP

Question. Are there no other options for containing costs than to cap the program?

Answer. Since 1984 States' positive financial health has spurred program expansions. Failure to impose any direct constraints on Federal costs could add significantly to the Federal budget. We believe the cap is the best measure for containing costs.

- The Federal Government could make decisions now being made by States about eligibility classes and kinds and scope of services. Instead of intense programmatic involvement in telling States how to structure their programs, we prefer a program of fiscal restraint which allows the States to make those decisions.

- States have responded by implementing a wide range of cost containment measures utilizing home and community-based waivers, which allow Medicaid to pay for alternatives to institutionalization for its recipients; freedom-of-choice waivers; implementation of cost-effective hospital payment systems, such as prospective payment systems; greater use of ambulatory surgery; increased enrollment in HMOs; greater accuracy in eligibility determinations; and alternative nursing home reimbursement methodologies.

- A $300 million "hardship" fund is provided in FY 1988 for States which, in spite of aggressive cost control efforts, exceed their limits. This fund will facilitate the transition to a capped program and will be available to States experiencing undue hardship.

INDEPENDENT LIVING INITIATIVE

Question. Have you gotten any indication from Members of Congress that your proposal to repeal the Independent Living Initiative will be enacted?

Answer. The proposal to repeal the Independent Living Initiative has been discussed with several Members of Congress but there was no indication whether the Congress would or would not enact it.

INDEPENDENT LIVING

Question. What kind of a signal from Congress will suffice to get you to release these funds?

Answer. Congress has given no indication that the proposal to repeal the Independent Living Initiative will be enacted. Therefore, the Department is continuing to implement the law.

The Office of Management and Budget has apportioned the funds appropriated by the Congress for the Independent Living Initiative. A Program Instruction was sent to the States on February 10, 1987, providing guidance on application procedures, as well as clarification on how the law should be implemented in terms of eligible participants, programs and activities, funding allotments, and reporting requirements. The States were requested to submit applications by May 11, 1987.

We are ready to review applications as soon as they are submitted, and the Department is ready to disburse funds to the States. We will process applications and grants as expeditiously as possible. Our goal is to award grants within 45 days after receipt of the complete application.

YOUTH 2000 INITIATIVE

Question. Your budget materials (page 50, OHDS) talk about a major inter-departmental effort to focus on the problems youth and their families face today, and list "improved physical, educational, and mental well-being for all young people" as one of the goals.

Can you tell us the specifics of this proposal?

Answer. Youth 2000 is a national campaign launched by Secretary Bowen and Department of Labor Secretary Brock to heighten awareness about the issues that threaten to prevent millions of young people from having a productive and rewarding future. In concert with a variety of public, private and voluntary organizations, we hope, between now and the year 2000, to motivate at-risk young people to limit self-destructive

behavior, make the most of their potential, and self-captialize on the fact that, due to changing demographics, jobs should be available to all qualified young people in the coming years.

Specific objectives of Youth 2000 are to reduce substance abuse among young people, reduce out-of-wedlock teen pregnancy, improve literacy and high school graduation rates, reduce accidental and violent deaths among teens and increase youth self-sufficiency.

A major focus of Youth 2000 is to encourage "grassroots" movements at the local level that will bring together community, business and government groups and leaders in new and effective ways to help at-risk youth. Youth 2000 is not perceived as a short-term effort or as a project in which the Federal government will play a exclusive role.

Within DHHS, a number of activities are underway or planned, all of which use resources already available through current programs. No request for increased or earmarked resources is anticipated. Examples of activities include 34 HDS discretionary grants supported in fiscal year 1986 which deal with at-risk youth, the funding of additional discretionary projects this year, support for regional and State conferences on Youth 2000, and the development of public information materials.

Question. Is the proposed $5.5 billion cutback in education programs part of this inter-departmental effort?

Answer. No. The Youth 2000 initiative is not connected with proposed changes in funding for programs administered by the Department of Education. The inter-departmental aspect of the initiative involves the Department of Health and Human Services and the Department of Labor.

Question. How can youth be a major concern when you no longer propose specific funding levels for programs under the Administration for Children, Youth and Families - replacing them with a "generic" appropriation?

Answer. A generic appropriation would allow increased emphasis on priority groups, such as at-risk youth. As opportunities arise to support or promote new activities to help young people avoid problems that lead to dependency and wasted potential, a generic appropriation would make it easier to direct additional resources to these efforts within existing Administration for Children, Youth and Families and other Office of Human Development Services programs.

Responsibility for the Youth 2000 campaign does not rest exclusively within the Administration of Children, Youth and Families. It is a Department-wide initiative in which the office of Human Development Services components, the Public Health Service and the Family Support Administration are equally involved.

YOUTH 2000 INITIATIVE

Question. Do you really believe that the well-being of young people will be improved by your proposals to cut Child Welfare Services, and eliminate the Foster Care Independent Living Program?

Answer. The budget request does not propose cut the Child Welfare Program below the 1986 level in either 1987 or 1988. After reprogramming in 1987, the level would be slightly higher than the 1986 operating level.

The proposal to repeal the Independent Living program in 1987, before it is implemented, is not intended to hurt the well-being of youth. The proposal exists because States may provide comparable services under the Social Services Block Grant and Child Welfare Services program, which total $2.9 billion in 1987.

FORMATION ON FAMILY

Question. Does the Department plan to initiate activities in the area of responsible family formation? If so, will these activities focus on teens? What services will be provided?

Answer. I have set goals and developed objectives for youth and families for the year 2000. One broad goal is to foster responsible family formation, specifically to reduce the incidence of out-of-wedlock teen pregnancies. The Department is interested in helping adolescents become self-sufficient responsible adults. We feel that delaying family formation until women have finished school and are married is key to this objective.

The Secretary's Initiative on Teen Pregnancy Prevention seeks to coordinate those programs within the Department which relate to the issue of teen pregnancy and to bring greater focus toward primary prevention. Our chief strategy is to encourage as many groups as possible to become aware of the problem and to use their influence at the community level to help communities build agendas which can lead to the reduction of out-of-wedlock teen pregnancies. The Department's role is to provide leadership, information, and funding assistance, where possible.

Question. What is the estimated cost of these services?

Answer. No new money has been sought for this initiative; rather efforts to target resources toward prevention are being sought.

Question. Where will the funding for the services come from?

Answer. The Department presently supports 200 research demonstration and evaluation project grants, expanding the information base which is made available to States and communities. We also provide funding for services relating to teen pregnancy prevention: through three block grants, Title V Family Planning, and Medicaid.

Estimates for family planning are about $500 million which includes family planning information and education, medical services, and contraceptive materials. Exact estimates for teen pregnancy prevention and care programs are difficult, especially because of State flexibility in use of block grants and difficulty of breaking out teen services in Medicaid.

ADOLESCENT FAMILY LIFE - REDUCTION IN FUNDING

Question. This year, you are requesting $10.1 million for the Adolescent Family Life Demonstration program. This is a $4 million reduction in funding from last year's appropriation. Why are you proposing this reduction in funding?

Answer. The decrease in funding represents the first year of a planned 3 year phase over. This program was established as a demonstration program to develop and test ways to deal with the problem of adolescent pregnancy.

We have been very pleased with the wide-ranging and innovative approaches to the problems of premature sexual activity and subsequent pregnancy which have been developed and tested through this demonstration and research program. Evaluations of the more than 100 tested innovative approaches for services delivery are now becoming available for dissemination to interested communities to help them in setting up their programs.

The three-year phase down of AFL will give us the opportunity to step back, examine the findings that are available, see what works and what doesn't, and disseminate that information so that communities can deal with the very complex issues surrounding premature sexual activity and subsequent pregnancy.

TEEN PREGNANCY/CHILDBEARING

Question. Are there adequate programs available to address the prevention of adolescent pregnancies and childbearing in this country? If so, what are they? Are they being utilized? How well are they working?

Answer. Over the past several years, the problem of adolescent pregnancy has received increasing attention in the media, among community leaders and among social service providers. At least partially as a result of this attention, numerous new prevention

strategies and efforts have been developed by the various public and private sector groups concerned with this serious problem.

Because of the unique approaches which prevention projects develop in each individual community, statistics on numbers and types of prevention programs across the nation are not available. We know of numerous prevention models; some focusing on prevention of premature sexual activity, some on improving parents' abilities to educate their children on sexual matters, some on improving adolescents' self esteem and sense of purpose, and some focusing on provision of contraceptives to already sexually active teens. Local and community groups have initiated programs to reduce premature teenage sexual activity and subsequent pregnancy, such as: family life/sex education courses in schools or through social service agencies, church and youth group activities, crisis pregnancy centers, health clinics, etc. At the Federal level, prevention programs are supported by the Family Planning Program (Title X); the Adolescent Family Life Demonstration Program (Title XX); the Maternal and Child Health Block Grant; Medicaid; and through Title XX of the Social Security Act.

Because of the breadth and variety of prevention programs currently in use, it is difficult to make generalizations as to their effectiveness. Further, programs working well in one area may not be acceptable or effective in some other setting.

The Department's Adolescent Family Life Program is currently funding 40 prevention demonstration grants that are providing innovative services across the nation. In fiscal year 1985 alone, almost 50,000 preadolescents and adolescents were served in these prevention projects, along with over 20,000 parents. Final evaluations on many of these projects will soon become available for dissemination to interested entities. Preliminary evaluations have shown that some of the approaches tested appeared to be both successful in their primary settings and transferable to other community settings.

CHILD DAY CARE

Question. What data are available on the number of child day care slots available in this country, the number and ages of children currently in specified forms of day care, and the number and ages of children in need of day care services?

Answer. Day care is provided in a wide variety of settings under many different auspices ranging from informal, home-based care by family members or friends to center-based child development programs administered by private organizations (e.g., Montesorri preschools) or public agencies (e.g., Head Start). Within the private sector, day care chains such as Kindercare or Children's World are playing an increasing role.

The Federal government, consistent with paperwork burden reduction goals, has not attempted to collect data on all day care arrangements. However, several new studies are underway and selected data are currently available.

- According to the Census Bureau, in June 1982 about 31 percent of working mothers with children under age five used in-home care for their children, generally by a member of the family or other relative. An additional 40 percent sent their child to someone else's home. About 15 percent used a group care facility such as a child care center, nursery school or Head Start program. The remainder used various other arrangements. Almost a sixth of these working mothers used more than one type of arrangement for their youngest child.

- A new study by the Census Bureau entitled "After School Care of School-Age Children: December 1984" reports that nationally 55.1 percent of children aged 6-13 years old with mothers who were employed full time were cared for by parents. An additional 15.1 percent were in home-based care with a nonrelative, in group care or in other arrangements. Slightly more than 15 percent either stayed by themselves during non-school hours (11.7 percent) or with a sibling under age 16 (4.5 percent).

- New child care data from the Census Bureau's Survey of Income and Program Participation (SIPP) are expected by early summer. In addition a new national study by the Centers for Disease Control is currently underway, with early results expected in the fall. ASPE is also conducting internal analyses of the SIPP data tapes which will be available along with the Census report this summer.

- A 1986 analysis by ASPE of "Day Care Centers: 1976-1984" suggests that the growth of day care center capacity in the United States over the past decade has increased more than the number of young children who have working mothers.

- Existing data bases related to child care include the ACYF National Child Care Center Study (1979); the Consumer Expenditure Study (1980-1981); the ACYF National Day Care Home Study (1981); the Census Bureau's Child Care Arrangements of Working Mothers (1982, cited above); the ACYF School-Age Day Care Study (1983); the Census Bureau's Survey of Income and Program Participation (1983-1985); the ACYF National Employer Supported Child Care Study (1984); the Census Bureau's survey of After School Care (1984, cited above); the National Longitudinal Survey of the Labor Market Experience of Youth (1985), and a number of small-scale local studies of child care demand and supply.

Question. What is known about the quality controls in the various day care programs?

Answer. The primary responsibility for quality control in child care programs rests with parents who, as consumers, select the programs which best meet their own their children's needs and who are in the best position to know when problems occur. A well-informed parent is thus the best form of quality control exercised at the local level in individual child care settings.

Public quality control is a State and local responsibility. This policy is consistent with the Administration's general goals

to increase flexibility for the States and to reduce regulatory burden throughout the society. All states currently subsidize child care for low income families and regulate child care programs according to their own sets of standards. These standards and accompanying monitoring systems vary considerably from State to State. Local communities also regulate child care through zoning, fire safety provisions, health standards and other restrictions. Head Start, the only Federally administered comprehensive child development program, is subject to performance standards around which program monitoring occurs.

We believe quality is a function of training. The ACYF Child Development Associate Credential is a national competency-based training program aimed at increasing the availability of competent caregivers. More than 20,000 individuals have earned the CDA credential, and 60 percent of the States have incorporated CDA into their child care licensing requirements. Last year, new CDA components for family day care providers and providers of infant care were also made available to the field. In the next ten years, ACYF hopes to have 40,000 more qualified staff to care for our young children in Head Start programs, child care centers, and family day care homes. As part of this major thrust, the Department of Army Child Development Services Branch has arranged with ACYF and the Council for Early Childhood Professional Recognition to train CDA Advisors and Representatives and to increase CDA assessment and credentialling at ten Army child care demonstration sites located statewide and overseas. This agreement will substantially increase qualified early childhood staff for the 284 Army child care facilities world-wide.

Question. What is known about the cost of the programs?

Answer. We know that program costs vary greatly depending upon the type of care, length of care, extent to which educational or child development elements are present, geographic region, and auspices. According to the National Commission on Working Women, most working families can expect to spend about 10 percent of their income on child care. In family day care, yearly costs range from $1,500 to $3,250 for children under age six. Centers care reportedly costs from $1,750 to $3,800 per year. In fiscal year 1986, Head Start spent an average of $2,434 per child in Federal funds.

Question. Have you plans to collect such data? When?

Answer. The national survey being conducted by the Centers for Disease Control will provide some cost data as will Census Bureau's SIPP report being released later this year. In addition, ACYF has developed preliminary plans for a new national study which will examine economic factors affecting the supply of child care which will be funded in fiscal year 1987. This study will examine a variety of issues including costs, distribution of supply, and factors which promote or inhibit a healthy child care market.

DEPENDENT CARE

Question. Last year, the Administration proposed to rescind the newly-authorized program for before-and-after-school care for children (dependent care planning and development). What funding

would be provided for this program under the FY 1988 generic request for social services discretionary activities?

Answer. No specific decisions regarding the dollar levels of individual programs have been made. These decisions will be made when the Congress has appropriated the overall social services discretionary activities program.

DAY CARE

Question. How does the Department plan to address the concerns that have been expressed about the need for Federal involvement in child day care?

Answer. The Department and other parts of the Federal government are significantly involved in child care. Since 1980, total Federal child care support has increased by approximately $2.9 billion or 47 percent, reaching an estimated $5.5 billion in fiscal year 1987.

- HHS provides substantial support for child care through the Social Services Block Grant (SSBG) which was placed into effect on October 1, 1981 to give States more control over social services dollars. States use an estimated 15-20 percent of their SSBG funds for child care services. The President's FY 1988 budget for the SSBG is $2.7 billion.

- Head Start is now a billion dollar preschool program administered by the Administration for Children, Youth and Families (ACYF). The Head Start program has increased by $340 million since 1980. In fiscal year 1987, Head Start will serve more than 452,000 children, over 12 percent of whom are handicapped. Intended primarily for preschool children from low-income families, Head Start program provides comprehensive educational, medical, dental, nutritional, mental health and social servies. The Head Start program also emphasizes significant involvement of the children's parents.

- In FY 1987 ACYF will provide $5 million for State Grants for Dependent Care Planning and Development. States that applied for funds for information and referral systems for the elderly, developmentally disabled adults and children, and for local programs for school age child care services received at least $50,000 in FY 1986. The purpose of the grants is to assist in planning, development, establishment, expansion or improvement of services, but not for actual operating expenses.

This proposal includes day care for mothers in AFDC work and education programs. The Department has also proposed changes to the welfare system which will help recipients achieve economic self-sufficiency and reduce welfare dependence. Entitled the "Greater Opportunities Through Work Act of 1987" (GROW), this proposed legislation would require AFDC recipients, including those with young children, to participate in a variety of work-related activities. Teenage parents would be required to

stay in school until they graduate. AFDC would pay for child care and other support services needed.

The Department is also promoting sound early childhood experiences through continued improvement and expansion of the Head Start program and through linkages between Head Start and other segments of the early childhood field. For the past 21 years Head Start has been committed to providing a high quality, comprehensive child development program. We are strengthening this commitment by seeking innovative ways to serve young children with the involvement of their families. Many of these new initiatives are helping to improve child care services other than Head Start.

- An interagency agreement has been signed with the Department of Labor's Employment and Training Administration to stimulate coordination of Job Training Partnership Act (JTPA) resources and child care programs nationwide. Under this agreement, State and local training, child care and JTPA programs will have the opportunity to combine services and resources in ways which work effectively for them in their own communities. In order to facilitate these efforts, ACYF plans to fund models to demonstrate ways in which Head Start and JTPA programs can work together to provide more training for Head Start staff and other community child care providers.

- An interagency agreement has been developed between the Head Start Bureau and the Public Health Services to develop materials for child care program directors and parents. These materials will provide information needed to prevent the spread of contagious diseases in Head Start and day care programs.

- Innovative Head Start projects are developing satellite family day care homes to meet the needs of working Head Start parents for full day care, to meet other special family needs, and to extend Head Start services to home-based child care. Other innovation grants have been awarded to Head Start programs to provide comprehensive services for parents in JTPA training projects who need full day care. Some child care slots will be available to meet the changing needs of these families. Innovation projects are also developing model playgrounds, the plans for which will be made available to child centers and other Head Start programs. In fiscal year 1987, ACYF plans to provide $2 million for Head Start Grantees to develop and implement additional innovative program options or innovative adjuncts to existing programs.

ACYF also funds child day care demonstration projects through the OHDS Coordinated Discretionary Funds Program. This grant program is designed to give many groups the opportunity to compete for funding of important and innovative initiatives.

- In fiscal year 1986, ACYF funded 17 grants to stimulate community college involvement in competency-based Child Development Associate Training for family day care providers. Approximately 15-20 additional such grants will be funded in fiscal year 1987.

- In fiscal year 1986, ACYF also funded several projects to identify effective approaches to providing family day care and to improve the effectiveness and quality of family day care providers. Chief among these is the California Child Care Initiative spearheaded by Bank American Foundation. This project is a public/private partnership utilizing funds from Federal, State, County and local agencies, corporations and private foundations. This initiative is designed to recruit and train family day care providers in order to increase the supply of quality care and better meet rapidly rising demand. The project is currently operating through 16 child care resource and referral agencies in 10 counties. Further expansion is planned for 1988. This model is viewed as a prototype for other states.

- ACYF has recently completed a state-wide initiative in Massachusetts to improve child care quality through the organized efforts of voluntary citizens' councils. These councils are established, trained and coordinated by the Massachusetts Office for Children. As a result of this project, over 150 trained volunteers now play a strong and continuing child care role throughout the Commonwealth.

- ACYF is also continuing extensive research and demonstration to increase knowledge of how child care affects the workplace, develop new models for employer supported child care programs, and help establish community systems which include employers as a major source of support.

RURAL HEALTH

Question. What can you tell us about the relative health status of the rural population of the U.S. as compared with the rest of the population? Is it better overall or worse?

Answer. Responses to the National Center for Health Statistics' "National Health Interview Survey" (NHIS) on self-assessment of health status indicate relatively small differences between persons in non-metropolitan areas and persons in metropolitan areas on whether they assess their health as excellent, good, fair or poor.

Question. What segment of the rural population has the most serious problems in terms of health status? The aged? The children?

Answer. There are no current studies available which have specifically determined the relative differences in health status according to age for the rural population versus other population groups.

Question. What is the current status of the supply of health care providers, both health personnel and facilities, in rural areas of the U.S.?

Answer. The number of physicians (MDs) practicing in non-metropolitan areas of the country in 1985 was 61,424 or 13 percent of the total active U.S. supply of physicians. This amounted to about 109 physicians per 100,000 persons residing in these areas

compared with a ratio of 230 physicians per 100,000 population in metropolitan areas. Nearly 85 percent of the physicians in non-metropolitan areas were in office-based practices and about 27 percent were in general/family practice. The active supply of physicians practicing in non-metropolitan areas increased 56 percent from 1970-1985 compared with an increase of 71 percent in the number of physicians in metropolitan areas during this period. However, during the 1980-1985 period, the number of MDs in patient care in rural areas grew at about the same rate in rural areas as in urban areas -- roughly 20 percent increase in each.

In 1985, there were about 228,800 community hospital beds in non-metropolitan areas or about 4.1 beds per 1,000 persons residing in these areas. The number of beds in these areas has declined about 3 percent since 1983. The total number of persons employed in hospitals in non-metropolitan areas in 1985 was 477,733, or about 8 percent fewer than were employed 2 years earlier in 1983. By way of comparison, the number of persons employed in hospitals in metropolitan areas declined about 2 percent over this period to 2,547,196.

Health Care in Rural Areas

Question. What programs and activities of the Department of HHS support the provision of health care in rural areas? How are such programs coordinated to insure effectiveness and avoid duplication?

Answer. The Public Health Service (PHS) supports health care to rural areas primarily through grants for Community Health Centers and Migrant Health Centers, and through direct provision of health services by the assignment of National Health Service Corps (NHSC) personnel to health manpower shortage areas (HMSAs) and the operation of the Indian Health Service (IHS).

Approximately 60% of the over 600 Community Health Centers are located in rural areas, and over half of the 58 Black Lung Clinics offer health services to beneficiaries residing in rural areas. NHSC health professionals serve primarily in rural HMSAs to repay the Government for financing their medical education costs. The IHS provides comprehensive health services to American Indians and Alaskan Natives through a network of 51 hospitals, 71 health centers, and about 500 smaller health stations and clinics operated by the Federal government or tribal groups primarily in rural areas.

The Maternal and Child Health Block Grant to States also provides a source of funds to service delivery programs located in rural areas. Many Maternal and Child Health programs in States such as Kentucky, Tennessee, West Virginia, Michigan, and California, have outreach programs using either health professionals or community counselors trained to bring health care services to rural populations through efforts such as home visits or transportation services.

In addition, Federal financial assistance in health professions training programs over the past 20 years has greatly improved the geographic distribution of medical personnel in the

United States. Between 1980 and 1985, the number of physicians in patient care in rural areas grew by 20%. The number of primary care health manpower shortage areas is expected to further decline from 1,949 in 1986 to about 1,250 in 1992, a decrease of about 40%. Approximately two-thirds of the HMSAs are in rural areas.

A major objective of the Department is to increase State involvement in the planning, development, and operation of Federally supported primary care programs. By developing a working relationship with key State health department staff, it is possible to determine where Federal and State policy priorities overlap. Some States are also establishing public/private consortia to link Federal, State, local, and private resources into organized systems of health care in rural areas. For example, New Mexico linked NHSC sites in Tierra Amarillo and El Rio with two private clinics in Truchas and Mora to share health personnel and secure financial management competence.

Medicare and Medicaid programs of the Health Care Financing Administration (HCFA) also provide financial assistance for medical care to eligible individuals located in rural areas. With the changes the 1986 Omnibus ReconciliationBudget Act made in the way hospital profitability is projected and prospective payment rates are calculated, we estimate that past differentials in profitability between rural and urban hospitals will be substantially narrowed. This should also serve to improve health care services to rural areas.

Health Care Services in Rural Areas

Question. What kinds of research are supported in agencies of the Department on HHS into rural health care and the problems of providing health care services in rural areas?

Answer. The mission of the Bureau of Health Care Delivery and Assistance is not to conduct and support research. However, because of a programmatic interest in rural health care issues, the Bureau has participated in, and in some cases, supported activities to improve health services in rural areas:

- A feasibility study to determine the most appropriate intervention strategies for maintaining/improving health services in frontier areas and the development of frontier health resources.

- Increasing the understanding of the range of roles for rural hospitals in providing rural health services. Products are a four-part series on "Survival Strategies for Rural Hospitals".

- Study of physician diffusion which looks at changes in age, sex, specialty and place of training for physicians in rural communities of various sizes -- this study is ongoing.

The Bureau also participated in the HRSA study on Rural Hospitals/Health Services. The report is currently in draft form.

The National Center of Health Services Research is also involved in a study of rural health.

Questions Submitted by Senator William Proxmire

Organ Transplant

Question. Why has the Administration failed to include funding for the National Organ Transplant Network in the proposed 1988 budget?

Answer. No funds are requested in the 1988 budget for the National Organ Transplant Network because the 1987 appropriation of $7.4 million, an increase of $5 million over the 1986 level, is sufficient to cover all program requirements in both 1987 and 1988.

PANCREAS TRANSPLANT

Question. Medicare covers all kidney dialysis and transplant patients immediately if there is no private insurance and after one year if the patient has private insurance. Medicare does not cover pancreas transplants and until it recognizes this procedure, private insurance companies refuse to recognize it. A pancreas transplant would perhaps prevent the necessity of kidney dialysis or transplant and would perhaps prevent the complications of diabetes such as blindness, stroke, heart attack, etc.

What is the cost of a pancreas transplant and if this procedure were recognized as a reimbursable one by Medicare, would we save money in the long run, if it helped alleviate future kidney dialysis and transplants?

Answer. Pancreas transplants are considered to be investigational and therefore not covered. The procedure has not been proven to be safe and effective and the clinical indications for its use are not well established. These factors preclude any consideration of cost savings that might be associated with Medicare coverage of the procedure. We are aware of the exciting research that is taking place in several transplant centers across the country and we are following their progress with great interest. Once we have determined that the procedure is safe and effective and that its use is widely accepted by the medical profession, we will provide Medicare coverage for it. We estimate the cost of the procedure to be between $30,000 and $40,000.

Questions Submitted by Senator Quentin N. Burdick

Lengthy Acute Hospital Care

Question. Concerning your catastrophic care plan, could you tell me what percentage of our population is in need of the lengthy acute hospital care that would

be provided under your plan, as compared to the number of people who need long-term care?

Answer. Approximately 7 percent of the Medicare population experiences the need for hospital inpatient care that results in the need to utilize coinsurance days, i.e., more than 60 days benefit period, under the current program. For example, in 1984 approximately 2.5 million beneficiaries had to use coinsurance or lifetime reserve days under the current Medicare structure. Of course, an individual's use of coinsurance days does not mean he or she necessarily experienced catastrophic expenses. A more accurate measure of how many beneficiaries experience catastrophic level expenses is to observe those who incur out-of-pocket expenses in excess of $2,000 per year. Generally, this is the population that experience lengthy acute hospital care along with related medical services for physician care, surgeon's care, etc. We estimate that in 1987 approximately 1.2 million individuals or 3.8 percent of the Medicare population will experience this level of liability under the current Medicare program and would, therefore, benefit from out catastrophic care proposal.

At any given time, approximately 1.4 million or 5 percent of elderly citizens require nursing home care.

Federal Involvement Chronic Illness Care

Question. Would you agree that chronic illnesses, conditions that may require nursing home care, home health care, community-based care, and creative alternatives such as adult day care, are the central problems facing our aging population? Would you further agree that these are areas in which there must be some federal involvement?

Answer. I certainly agree that the specter of a chronic illness, along with the loss of independence and financial problems that often accompany the onset of chronic conditions, is a problem that is of fundamental concern to almost all older persons. I also agree that when illness strikes, we need to have a health care system in place that can respond appropriately. In my view, an 'appropriate' system embodies the following values:

- It operates in a way that helps preserve and strengthen the family and the ability of the family to take responsibility for the well-being and nurturing of all family members.

- It contains incentives for cost containment through effective use of resources by individuals and providers.

- It offers individuals choice and the freedom to make decisions about the care to be provided, as well as to take personal responsibility for decisions made.

- It fosters productivity, innovation, and growth through free, fair, and open markets.

- It provides equitable treatment of individuals. And,

- It adheres to the principles of Federalism--the conviction that the States, local governments, private organizations, and individuals should have maximum authority to define the character of life in this society.

In answer to the second part of your question, I would point out that the Federal government is already a significant partner in efforts to address the problems you cite. Not only does the Federal share of the Medicaid program provide reimbursement for a substantial portion of the long-term care services required by the elderly, assistance is also provided through the programs of the Older Americans Act, the Veterans Administration and the Social Services Block Grant.

Catastrophic Illness Expenses

Question. I'm also concerned about coverage for children and those under age 65 who face catastrophic illness. What is your estimate of the number of children whose families face catastrophic illness expenses?

Answer. Depending on one's definition of catastrophic costs, the number varies. One of the possible definitions of catastrophic costs is annual family medical expenses exceeding $2,200. We estimated for 1987 that 4.6 million children (age 18 or under) are in families that have medical expenses exceeding the $2,200 threshold.

Question. Keeping in mind that your budget proposal would cap federal Medicaid payments to the states, how would you propose to provide coverage for these children and others under the age of 65 who have catastrophic health expenses?

Answer. First, we should note that Medicaid is intended to cover certain poor groups, and offers assistance, depending on the State, to certain children with larger medical bills. For families of greater means, other approaches to catastrophic costs, such as State risk pooling, offer greater promise.

This Administration is committed to providing the States with increased Medicaid flexibility in order that the program might be tailored to meet States' particular circumstances and needs, and so that States might improve both the efficiency and effectiveness of the program. It is my belief that through the combination of improved targeting of Medicaid benefits and increased efficiency, savings will be realized that States can then use for high-priority innovations including the financing of catastrophic-related health services for the poor.

In addition, the Federal government contributes through other mechanisms to health care for the poor. These include the community health centers program; the social services, maternal and child health and mental health block grants; and hospitals' Hill-Burton related free care obligations. States have considerable flexibility to use some of these resources for the relief of children and adults requiring high-cost medical services.

NATIONAL HEALTH SERVICE CORPS (NHSC)

Question. I'm from a rural state, Mr. Secretary. There are places in North Dakota where you have to go a long way to see a doctor, and some of the hospitals and clinics have had a very hard time getting and holding onto health professionals. It disturbs me deeply to see that you have proposed rescissions of $18 million of last year's funds for the NHSC and Corps scholarships, and a phase-out of the Corps by 1990.

You note that there has been an 80 percent increase in the number of physicians since 1970 -- where are these physicians practicing?

Answer. While it is true that the vast majority of diffusing physicians (MD and DO) have been establishing practices in urban, suburban and close-in rural areas, some very preliminary results from a study of population to physician ratios in "frontier" counties of the country are encouraging. For example, it appears that physician availability has increased by 18 percent in frontier counties (counties with a population of 6 or fewer per square mile) with a population in excess of 10,000 persons and 3 percent in frontier counties with a population less that 10,000 people.

Question. During this time period, what has been the change in practice patterns in the non-metropolitan areas of our country?

Answer. Preliminary findings from a study on physician availability in "Frontier Counties" of the nation (1975-1985) indicate the following:

- The percent of physicians who are board eligible has increased from 19.6 percent to 41.8 percent.

- The percent of physicians in solo or partnership practice(s) has decreased from 68.4 percent to 58.2 percent, while those

in group practice has increased from 12.7 percent to 16.1 percent.

- o The percentage hospital based physicians has increased from 3.2 percent to 12.3 percent.

In summary, the trends are similar to those in urban and suburban areas but that the rate of change is generally slower.

Health Care in Rural and Underserved Areas

Senator Burdick. If Congress agrees to phase-out the Corps, and I don't agree, how would you propose to ensure access to care for the millions of people who live in rural and underserved areas?

Secretary Bowen. The diffusion of physicians, even into isolated rural areas, is taking place. However, we recognize that despite this documented success of Federal, State, and local training and placement programs over the last 20 years, there will remain certain communities that may require innovative efforts to secure the placement of health professionals. We have under consideration a loan repayment program. We believe such a program should be administered in partnership with State and local governments, and that the Federal role in such a program should be a transitional one until States and localities are able to assess their responsibilities in the area.

Funding Cut in the Indian Health Service

Question. Your budget proposes a cut of $126 million from the Indian Health Service (IHS), and claims that communities and "other governmental sources" will make up for this huge funding cut. What "other governmental sources" did you mean?

Secretary Bowen. The "other governmental sources" relate to the Administration's thrust that major health care reimbursement programs - Medicare and Medicaid - should be viewed as an optimum source of funding for the Indian Health Service hospital and clinic system. This system currently depends quite heavily on annual direct appropriations.

RURAL HOSPITALS

Mr. Secretary, I told your staff this question was coming, so I hope you'll have an answer for me.

If the rural hospitals in North Dakota are any indication, and I think they are, the Prospective Payment System is not doing very well by the rurals. I appreciate the changes that have been made to PPS that make the system less burdensome to rural hospitals -- but you and I both know that these changes were made over the objections of the Administration.

In 1983, when PPS was put into place, the Congress mandated a report from HCFA on the feasibility of eliminating the urban-rural payment differential, which was supposed to be presented to Congress in 1984. The Department said they had to hold off finishing the report so they could use 1984 data, and we didn't have a problem with that.

But, when we didn't have the report by the Fall of 1985, and we were hearing loud objections from rural hospitals, we got concerned. So in the FY 86 Labor/HHS funding bill, the Committee made a formal request that HCFA conduct a study of the effects of PPS on rural hospitals. Committee staff and HCFA staff agreed that the study would be finished by the due date of January 1, 1987.

I understand that HCFA decided to combine the two reports. Maybe that's what is taking so long. At a hearing last May, the report on rural hospitals was promised by this Winter.

Question. Mr. Secretary, I'm going straight to the top. It's March 12th. In my book, that gives you nine days before Spring. When are we going to get that report?

Answer. Our report "Studies of Urban-Rural and Related Geographical Adjustments in the Medicare Prospective Payment System" has been prepared and is presently undergoing review within the Health Care Financing Administration. We expect to submit the report to Congress this summer. It responds to the following Congressional mandates:

Separate urban and rural payment rates - Section 603(a)(2)(C)(1) of the Social Security Amendments of 1983 mandated studies of "the feasibility and impact of eliminating or phasing out separate urban and rural DRG prospective payment rates."

Regional payment rates - Section 603(a)(2)(A) of the same legislation mandated a study of "the impact of computing DRG prospective payment rates by census division, rather than exclusively on a national basis." Section 2311(f) of the Deficit Reduction Act of 1984 also calls for "a discussion of the relative merits of a method of payment under which a percentage of the payment amount (for discharges classified within a diagnosis-related group) could be determined on a regional basis."

Hospital-specific payment rates - Section 2311(f) of the Deficit Reduction Act of 1984 mandated "a study of further refinements which may be appropriate in the inpatient hospital prospective payment provisions of Title XVIII of the Social Security Act, in order to address the problems of differences in payment amounts to specific hospitals."

Urban wage index - Section 9103 of the Consolidated Omnibus Budget Reconciliation Act of 1985 mandates a study of refinements in the urban wage index, specifically consideration of distinguishing between the central city core and the suburban ring of metropolitan areas.

Varying proportions of labor and nonlabor components among DRGs - Section 2311(e) of the Deficit Reduction Act of 1984 also mandates

"a study of the distinction between urban and rural hospitals for purposes of the DRG payment provisions under section 1886(d) of the Social Security Act, and the effect which such distinction may have on rural hospitals in the case of those DRGs which do not vary significantly between urban and rural areas (such as those DRGs which involve expensive medical devices.)"

PHYSICIAN PAYMENT

Question. The recent report from the Physician Payment Review Commission notes that there are geographic variations in Medicare payments to physicians and notes that these variations may not be related to the cost of providing the care. The Commission recommended that Medicare pay a larger increment for primary care services in designated underserved areas. What does the Department intend to do about this recommendation?

Answer. We are in the process of conducting studies to examine the extent and reasons for geographic variations in the cost of medical services. These studies are looking at geographic differences in charge levels, payment levels, and total costs. We are also considering the problem of service definition, for example, some physicians may bundle activities under one service while other physicians may bill separately. Finally, we are developing an index to reflect justifiable geographic variations in the cost of practice as required by the Omnibus Budget Reconciliation Act of 1986 (OBRA-86). We will assess the incentives such a payment adjustment might provide to encourage physicians to practice in medically underserved areas and the feasibility of using this index to adjust payment.

Question. Does the Department support the higher payment to primary care physicians in underserved areas?

Answer. We believe that it is premature to take a position on this recommendation. The recommendation does not address important issues such as the amount of the proposed increase or the definition of service areas to which it would be applied. Since the recommendation requires budget neutrality, it would involve a reduction in payment to physicians that are outside the underserved areas. We will have to look at the data to analyze the overall effects of various options before we develop a position.

The Commission is recommending a payment increase to primary care physicians because it believes that low payments are inconsistent with goals to increase access to physician services in underserved areas. The problem is more complicated involving a variety of factors, such as demographic and economic conditions. It is not clear that an increase in Medicare payment rates will address the problem that the Commission hopes to solve.

Finally, we are conducting studies to look at the problem of whether overall Medicare payment rates are equitable. We need to consider the problem of payment in underserved areas in context of these broader efforts.

Question. There are currently at least two ways of designating underserved areas -- medially underserved and health manpower shortage areas. These are for both urban and rural areas. Which of these designations would the Department recommend using if this recommendation were implemented, and how would the Department recommend distinguishing between metropolitan and non-metropolitan underserved areas?

Answer. It is premature to make a recommendation on these definitions until we have had an opportunity to consider the relative costs and administrative impact of each option. Further, we need to consider the question of whether an increase in payment for certain physicians is a feasible solution to the problem of underservice in some areas. Finally, we need to review this recommendation in the context of our broader efforts to understand the reasons for geographic variations in payment levels.

Questions Submitted by Senator Lowell P. Weicker, Jr.

Family Planning

Question. Mr. Secretary, I would like to ask you a similar question I asked Assistant Secretary Windom when he was before this Subcommittee last week.

On February 5, you issued a memo to the HHS Regional Administrators to clarify the confusion that has been created by an earlier memo issued by JoAnn Gasper, the Deputy Assistant Secretary for Population Affairs. Ms. Gasper's memo had directed Regional Administrators to cut off family planning funds to Planned Parenthood because of her belief that the organization advocates abortion. While the clarification you issued did not clearly repudiate Ms. Gasper's directive, you have indicated publicly that no change is intended in the Administration's current policy with regard to Title X.

Mr. Secretary, as you know, the conferees on the FY 87 Labor-HHS Appropriations bill included language directing the Department to refrain from making further changes in the Title X program with respect to counseling and referral for abortions.

In light of these recent events, can you assure me that HHS has, in fact, abandoned it efforts to changes the Title X guidelines and will not engage in systematic effort to elininate PLanned Parenthood from participation in the program?

Answer. The guidelines have been in place for at least 14 years. Our memo simply stated three things: it reaffirmed the Administration's prohibition on the use of Federal funds for abortion; second, we requested each of our regional offices to reexamine all of these grantee programs to make sure all were

following the law; and third, we stated that legislation would be submitted to clarify this issue.

Legislation to amend Title X of the Public Health Service Act was submitted to the Congress on February 10, 1987. When enacted, this legislation should result in changes to the current guidelines.

Question. To follow up, is it safe for Congress to assume that, with the Administration's recent submission of legislation prohibiting recipients of Title X funds from performing or referring for abortion, there will be no further attempts to change Title X policy by Administrative fiat?

Answer. No administrative changes will be made in the Family Planning program.

Question. Mr. Secretary, while I recognize the need to allow program managers to, in fact, manage their programs, as the Secretary you make the policy. As far as I am concerned Jo Ann Gasper did not comply with the law and from what I can tell she violated Department Policy.

What assurances can you give me that memos such as the one Jo Ann Gasper issued will not be sent out again? Or for that matter, what assurances can you give me that there will not be any more decisions at any level that violate the law and Department Policy?

Answer. I can assure you that Department officials will abide by all laws and Department policies.

PROTECTION AND ADVOCACY

Question. Mr. Secretary, the ADAMHA budget request for fiscal year 1988 proposes to cut the Protection and Advocacy program for the mentally ill by $3.5 million in 1987 and 1988. The budget documents also indicate that the Department plans to phase this program out over the next few years. I told Dr. Macdonald that the proposal to cut this program would not be approved by Congress and that I intend, in fact, to see that this program receives an increase in 1988. Dr. Bowen, do you think it is fair to ask the mentally ill to bear the burden of budget cuts proposed by the Administration?

Answer. I agree that protection and advocacy for the mentally ill is important. However, as a matter of policy, it has always been this Administration's position that State and local governments must be more actively involved in directly providing services such as the protection and advocacy program for the mentally ill. It is our expectation that the benefits demonstrated by our initial funding of this program will stimulate States and localities to continue it as our funding phases out. These organizations are in a better position to target funds to meet their needs in a more economical way.

Question. What reason do you have to believe the States would continue to provide these services if the Federal Government did not provide the funds?

Answer. We believe that States will continue a program that has proven beneficial to their citizenry. We trust that the two years of support provided by the Federal government has demonstrated its importance with regard to the needs of the mentally ill and, thereby, will result in its continuance.

Catastrophic Care

Question. Mr. Secretary, I do think your proposal on catastrophic care is a good first step toward ensuring coverage of the astronomical costs which result from long-term health care. But I am concerned, Mr. Secretary, that your proposal does not go far enough.

Does your proposal include coverage of nursing home costs?

Answer. The Administration's legislative proposal is focused on providing protection for costs associated with those acute care services which are currently covered under the Medicare program. It would alleviate certain nursing home costs by eliminating the coinsurance that is currently required for days 20 to 100 in a skilled nursing facility for post-acute or rehabilitative services, with a maximum of 100 days of covered skilled nursing home care per year. However, the proposal would not cover the costs of nursing home care for persons who require long-term care services for chronic illness.

There are other elements of the President's initiative that address the availability of financing for long-term care services for the elderly. They include:

- a major private/public collaboration to educate the public about the risks, costs and financing options available for long-term care;

- direction to the Treasury Department to study encouraging personal savings for long-term care through a tax-favored individual medical accounts (IMAs) that are combined with insurance protection, and amending individual retirement account (IRA) provisions to permit tax-advantaged withdrawal of funds for long-term care expenses; and

- direction to the Treasury Department to study development of the private long-term care insurance market through legislation providing tax incentives for purchase of such care by individuals or employers.

In developing the long-term care strategy, the Department sought to find the right mix of public and

private initiatives for expanding the availability of private financing mechanisms. We felt it important to look at the potential of private sector contributions in this area since Federal, State and local governments are already significant partners in sharing the burden of long-term care expenses.

Long Term Costs

Question. What about those who do not meet the age eligibility requirements for Medicare? Here I specifically mean young children with disabilities that require frequent and often long-term hospitalization. Many health insurance policies just do not cover such long-term costs.

Answer. As you know, the Administration's approach recognizes and addresses solutions unique to the populations of three distinct risk groups: the Medicare population requiring acute care; the elderly population requiring long term care; and the general population under age 65.

The Administration's legislative proposal specifically deals with catastrophic coverage for Medicare beneficiaries: the elderly or disabled. There are a small number of children (estimated as of January 1986 to be 2800) who principally qualify for Medicare due to their status as end stage renal disease patients. The proposal may benefit some of these children who have high out-of-pocket expenses.

The Administration's plan for catastrophic illness aims at improving protection for the general population (those not covered by Medicare) through a component calling for vigorous activity in working with States to develop innovations and initiatives to help families with catastrophic expenses. Some of these include:

- Requiring catastrophic coverage be offered in all employment-related health insurance;
- Forming State risk pools to subsidize insurance for those whose medical condition makes it prohibitively expensive or impossible to get insurance;
- Changing Federal requirements to allow States greater flexibility in managing State Medicaid programs; and
- Developing new programs such as loan guarantees and catastrophic insurance requirements for motor vehicle registration.

Finally, we have the Task Force on Technology Dependent Children looking at home and community alternatives for care.

Question. Did you consider any provisions to address these kinds of catastrophic care costs?

Answer. Children were considered as part of the general population under the HHS report to the President. That report included a number of recommendations on ways States and the private sector can improve catastrophic coverage for the general population, including children.

AIDS Education

Question. Mr. Secretary, I understand the Department is developing a plan for an overall AIDS Education Program. When can we expect to see that plan?

Answer. On March 16, 1987, the PHS released the "Information/Education Plan to Prevent and Control AIDS in the United States (1987/1988)." This document presents a comprehensive PHS plan for informing and educating four major components of the American people about AIDS: (1) The Public; (2) School and College-Aged Populations; (3) Groups at Increased Risk; and, (4) Health Care Workers.

Funding for AIDS

Question. Do you think the funds you have requested in the 1988 budget are adequate for launching the kind of all out effort needed to limit the spread of a disease that has already claimed nearly 18,000 lives and is projected to claim hundreds of thousands over the next few years?

Answer. The 1988 budget request of $533.5 million is a net increase of $118 million, or 28%, over the 1987 level. This proposed funding level is nine times the $62 million amount we spent on AIDS in 1984. In 1988, additional expenditures will occur in all aspects of AIDS research and prevention activities. Emphasis will be placed on development and application of various vaccine and therapeutic treatment intervention strategies; intensive epidemiological studies to trace infection incidence; and public education and information dissemination efforts.

This request continues our commitment to do everything possible to find a cure and prevent the spread of this devastating disease. At this time, it meets all of the funding needs for AIDS currently approved by the PHS scientists and agencies. Because AIDS is our highest priority, though, we are constantly reassessing the scientific progress and educational opportunities and the adequacy of Federal resources for AIDS. We will continue to work with States, local governments, voluntary and community services organizations, and private businesses to prevent the spread of AIDS.

Question. How do you respond to the National Academy of Sciences' recommendation that we spend $1 billion on AIDS education and prevention by 1990?

Answer. We agree in general with the National Academy of Sciences conclusion that more needs to be done in the area of AIDS prevention and education. Accordingly, we have more than doubled our funding for this, from $31 million in 1986 to $79 million in 1987. We plan to spend $104 million in 1988, another increase of $24 million over 1987, which will permit further orderly expansion of AIDS information and education efforts.

AIDS is our highest priority, and we will continue to work with States, local governments, voluntary and community services organizations, and private businesses to prevent the spread of AIDS. Even the IOM acknowledges that these other levels will have to share in the cost and effort of AIDS prevention activities. The PHS estimates that the combined value of all efforts will be at least $1 billion a year by 1990. We will all probably need to continue such large expenditures on prevention for many years before we have adequate protections for society against this disease.

NIH Grant Funding Policy

Question. Mr. Secretary, The President's budget proposes cutting 1987 NIH Funds to pay for 1988 (and I might add at a funding level lower than what was appropriated in FY 87). In fact, not only were these cuts proposed, they were implemented without congressional approval. As you know, the GAO ruled that this constituted an impoundment of funds and it is my understanding that these funds have now been released. Is that correct?

Answer. Yes, that is correct.

Question. Are you now awarding grants in accordance with Congress' intent when the 1987 appropriations bill was signed into law?

Answer. Yes we are. As of February 24 the Public Health Service ceased to restrict the availability of 1987 appropriated funds while the Congress considers the budget proposal. The entire amount will be obligated during the current fiscal year unless the Congress enacts legislation to the contrary. In that event, only those projects scheduled to receive awards subsequent to Congressional action would have their grants reduced.

Amended awards will be issued as soon as possible to all grantees whose awards have been affected by the interim plan and whose projects merit the additional support. Also, competing research project grants at NIH will be made at a rate which will assure the award of the full 6,354 projects intended at the current appropriation level in a manner fully consistent with historical patterns.

Questions Submitted by Senator Arlen Specter

AFDC RESTRICTIONS ON MALES LIVING AT HOME

Question. About half the States will not allow an able bodied male to remain in the home while the family receives Aid to Families with Dependent

Children (AFDC). This policy is destructive to poor families and has a particularly devastating effect on Blacks and Hispanics. Why has the Department not provided incentives to States to allow the father to remain in the home as long as at least one parent participates in a job training program?

Answer. Just as with the regular AFDC program, States may choose to adopt an AFDC Unemployed Parent program (AFDC-UP) at any time. The Federal Government would match AFDC-UP benefits just as it does regular AFDC benefits (as much as 78% of the benefits in some of the States that have not implemented an AFDC-UP program). This is a more than adequate incentive. Mandatory AFDC-UP would violate the State discretion fundamentals to the AFDC program.

JOB TRAINING

Question. Preparing many AFDC adults for employment will mean remedial or basic education as well as specific job training, which can result in higher costs. In the past, some programs targeting this population have concentrated on job search and short-term, low-cost training which did not make the welfare recipient competitive. How will you ensure that welfare participants receive the opportunity to obtain education and training which will prepare them for real jobs rather than "make work"?

Answer. The Administration agrees that welfare recipients should be able to get necessary assistance to make them competitive for unsubsidized jobs. SInce private employers can be expected to pay wages only for value received we believe that any unsubsidized job is "real" and not "make work". If welfare recipients can be readied for available unsubsidized employment through job search assistance or short term training, such assistance is appropriate. More extensive training is necessary only when a welfare recipient otherwise could not qualify for available jobs. The Administration's welfare proposals assure considerable Federal aid for education, training, and employment assistance.

The President's GROW proposal would count education as participation for those without a high school diploma, and require AFDC recipient parents under age 19 and children between 16 and 19 to continue studying toward high school completion. This AFDC/youth proposal would permit States and localities to use the Summer Youth Employment and Training program funds for year-round training for AFDC youth.

There are already several existing sources of education and job skill assistance funds available through such other programs as Vocational Education, Pell Grants, Secondary Education Opportunity Grants, and JTPA. The AFDC program does not fund education

since this is primarily a State and local Government responsibility. However, other costs related to participation in education would receive the 50 percent Federal match. The Administration has also requested increased funding for Adult Education for fiscal years 1988 through 1992.

The Community Work Experience Program (CWEP) provides meaningful work experience for those who have little or no previous work history. It is also used to enable participants to regain or restore long unused work skills, and to develop a recent work history and references that will facilitate job entry in unsubsidized positions. It is not "make work". What some people need most are the basic job skills, and how to sell themselves to an employer.

MEDICAID COVERAGE OF GROW PARTICIPANTS

Question. What provisions will the Department make for Medicaid coverage of GROW participants who do not have an employer-sponsored health plan?

Answer. Current law already contains two (2) Medicaid provisions which would apply to GROW participants:

- Medicaid continues for four (4) months after losing AFDC due to increased earnings.
- DEFRA 1984 work transition provisions:
  - -- Medicaid retained for four (4) months with excess earnings disregarded ($30 + 1/3 of earnings
  - -- Medicaid retained for nine (9) months (plus six (6) months more at State option after losing AFDC

We believe that these existing provisions will ease the transition from benefit status to competitive employment. They provide necessary support for those entering the job market by continuing Medicaid eligibility for an initial period while the individual adjusts to being a member of the workforce.

AIDS - RISK GROUPS

Question. Statistics indicate that 40% of AIDS victims are Black and Hispanic. What specific and targeted efforts is the Department taking to inform and educate Blacks and Hispanics about AIDS and the risks for these groups?

Answer. AIDS has taken particularly harsh tolls in some Black and Hispanic communities, where IV drug abuse has often been an important factor of risk. Members of such minority communities, who do not use IV drugs, may also be at increased risk because of the potential for sexual and perinatal transmission to the partners or

newborn children of infected persons. CDC's program announcement for AIDS Prevention Programs, published in the March 6, 1987 Federal Register, required States to recognize these facts and provide a continued indication of plans to provide services that will particularly reach minority communities. According to information which CDC had gathered prior to this point about the status of the 55 AIDS Prevention Programs, 15 have activities aimed at their Hispanic populations and 21 have targeted informational services to the Black community. Most of these activities, to date, have focused on the necessary task of fully identifying the AIDS problem in each locality, including an assessment of the extent of needle-sharing locally. Data suggest that this varies remarkably around the country, and may be a reasonable predictor of the potential for infection among IV drug users. Survey results looking at, knowledge, understanding, and the perceptions of AIDS as a disease, its communicability, symptoms, and long/short term effects will guide each community's AIDS education strategy.

NIDA's AIDS Outreach Demonstration Projects are targeted to minority communities -- areas that have the highest incidence of intravenous (IV) drug abuse AIDS cases. The projects are designed to effectively communicate AIDS information to three high risk groups -- IV drug abusers, sexual partners of IV abusers, and prostitutes who associate with IV drug abusers. NIDA is currently preparing AIDS educational videotapes in Spanish and English.

NIDA's AIDS and Drug Public Education Program is designed to communicate basic information about the role of intravenous drug use in the transmission of AIDS, and how to prevent transmission of the disease. Development and distribution of educational materials in both English and Spanish is a component of the program. This includes printed material, radio and television public service announcements and advertisements for print media.

Question. What portion of funds appropriated for AIDS-related programs is specifically targeted by the Department for programs and activities directed at Black and Hispanic at-risk populations?

Answer. There is no way to specify the portion of CDC's AIDS-related program funds that are specifically targeted at Blacks and Hispanic at-risk populations, because applicants for AIDS Prevention cooperative agreements submit line-item rather than program budgets. Reports to CDC about program activities suggest that most areas are devoting a rapidly increasing amount of personnel time and energy to minorities. In some areas, such as those along the east coast where IV drug abusers account for a large percentage of AIDS cases, half or more of program staff time and efforts are targeted to minority populations. More than 80 percent of NIDA's $10 million AIDS demonstration projects and 75 percent of the AIDS Training/Education budget is targeted to at-risk populations (IV drug abusers, sexual partners of IVADs and prostitutes who associate with IVDAs) which are largely Black and Hispanic.

Question. How is the Department coordinating its efforts toward addressing the problem of AIDS as it impacts the Black and Hispanic communities?

Answer. The Office of Minority Health, located in the Office of

the Assistant Secretary for Health, is working with the PHS Executive Task Force on AIDS and the five PHS agencies to ensure proper coordination of AIDS activities among the Black and Hispanic communities.

For example, close communications have been established between the Centers for Disease Control and the National Institute for Drug Abuse to coordinate their AIDS control efforts. These efforts clearly have a direct relationship to the Black and Hispanic communities because of the factor of IV drug abuse. NIDA has taken major responsibility for activities to control the spread of HIV through an institutional focus on the drug abuse treatment system, whereas the CDC focus is on ensuring its grantees provide an appropriate array of educational and public health outreach services for minorities.

Question. Given the fact that Blacks and Hispanics are over-represented among AIDS victims who are IV drug abusers, what special efforts will the Department undertake to ensure that drug abuse programs are targeted at at-risk Black and Hispanic populations? How will you coordinate such efforts with other AIDS program activities for Blacks and Hispanics at-risk?

Answer. The Department has been reviewing all AIDS-related initiatives that involve minorities. It is also ensuring that close communications have been established between the Centers for Disease Control (CDC) and the National Institute for Drug Abuse (NIDA), which is an organization within the Alcohol, Drug Abuse and Mental Health Administration (ADAMHA), to coordinate their AIDS control efforts. Because of IV drug abuse, these efforts have a direct relationship to the Black and Hispanic communities. The CDC focus is on ensuring its grantees provide an appropriate array of educational and public health outreach services for minorities, and NIDA has responsibility for activities to control the spread of HIV through an institutional focus on the drug abuse treatment system.

The Office of Minority Health, located in the Office of the Assistant Secretary fo Health, is working with the PHS Executive Task Force on AIDS and the five PHS agencies to ensure proper coordination of AIDS activities among the Black and Hispanic communities.

One of the primary goals of NIDA's AIDS Outreach Demonstration Projects is to refer IV drug abusers at-risk to drug abuse treatment programs. Many thousands of minority drug abusers will be referred to treatment through these projects. Two demonstration projects are specifically designed to improve the capability of treatment programs to serve drug abusers at high risk. Other AIDS program activities/services supported by NIDA, other Federal agencies and private foundations, will be coordinated at both the Federal and local levels. For example, AIDS treatment services supported by the Robert Wood Johnson Foundation will be utilized in the cities receiving Health Resources Services Administration funds for demonstration projects on innovative and cost effective service delivery modalities designed to reduce the need for hospital care and, thereby, reduce the cost of caring for people with AIDS.

HOSPITAL-BASED PHYSICIANS

Question. In 1986, Congress established the Physician Payment Review Commission to make recommendations to Congress regarding modifications in reimbursement for physician's services under the Medicare program. The Secretary of Health and Human Services is required to report to Congress by July 1989. A proposed new Medicare payment system for designated hospital based physicians appears, however, to be superceding the Commission's mandate. Please clarify the Department's plans regarding the 1989 report?

Answer. The law requires the Secretary, in consultation with the new Commission, to develop a relative value scale (RVS) for physician payments and report to Congress on its potential application to Medicare by July 1989. We have funded a study with Harvard to develop the relative value scale. This study is on schedule and Harvard expects to submit their report by July 1988. We will then conduct the necessary analyses to assess the feasibility and appropriateness of applying the RVS to Medicare's payment system and prepare the required report to Congress. In the meantime, the Commission is conducting an independent assessment of alternative physician payment reforms, including the RVS approach being developed at Harvard. We are sharing information with the Commission and will continue to coordinate efforts.

Question. According to the Department of Anesthesiology at the University of Pittsburgh, the new Medicare payment system for hospital-based radiologists, anesthesiologists and pathologists (which is opposed by the American Medical Association and the American Society of Anesthesiologists) would: 1) adversely affect the quality of patient care and the patient's access to care; 2) jeopardize many of the new and complicated surgical procedures which currently are possible due to advances in anesthetic techniques; and 3) make anesthesiology less attractive both for those already practicing and for medical students now choosing a career. What are the Department's justifications for the proposed policy and do you believe the above noted concerns are valid?

Answer. Radiologist, anesthesiologist and pathologist (RAP) services are different from most other physician services because they are generally performed by hospital-based personnel, but are billed separately from the prospective rate. The prospective payment system has proven effective in reducing inpatient hospital costs for the volume and cost of inpatient RAP procedures increased despite a reduction in inpatient admissions. We feel payment reforms are necessary to address the perverse incentives of the current fee-for-service reimbursement system. Basing reimbursement for RAP procedures on an average area payment would provide appropriate incentives to enhance efficiency and limit unnecessary increases in the volume of procedures.

We do not believe that the concerns raised by physicians against our proposal are valid. The experience of PPS for inpatient hospital services has been the opposite. Hospitals have increased profits, while patient access and quality of care have been maintained.

PEER REVIEW ORGANIZATIONS (PRO)

Question. The Health Care Financing Administration (HCFA) has proposed regulations which will authorize Peer Review Organizations (PRO) to decide what is "standard" and what is "substandard" quality health care. Further, these regulations would provide for notification to the Medicare beneficiary that his/her medical care was substandard in quality before the hospital and physician had been notified of their right to appeal the PRO denial. Would these regulations intensify the problem of professional liability claims?

Answer. These regulations are being developed to implement legislative mandates that PROs deny Medicare payment in cases where they identify substandard quality of care, and notify the patient, attending physician, and hospital when a denial is made. Section 9403 of the Consolidated Omnibus Budget Reconciliation Act of 1985 specifically states that the PRO shall make determinations to deny payment on the basis of criteria which are consistent with guidelines established by the Secretary. Current plans are that physicians in each PRO will develop the criteria or standards for review in accordance with professionally recognized standards in the State. Denial notices would be issue in accordance with title XI of the Social Security Act: as is the case with all PRO denial determinations, the physician and/or provider must be given an opportunity to discuss the potential denial for substandard quality with the PRO and provide additional information, if available, before the denial is made. We believe that the legislatively required notification to the beneficiary that he or she received substandard quality of care, may have the potential to intensify the problem of professional liability claims. That is why we have been cautious in implementation and are publishing a Notice of Proposed Rulemaking which will afford will interested parties an opportunity to comment on policies.

MEDICARE CUTS

Question. The Administration proposes in FY 1988 a $6.8 billion reduction in Medicare spending. What would be the impact of these cuts?

Answer. Almost $2 billion of the figure you cite is added revenue from extending Medicare coverage. Regarding the remainder is important to remember that the proposed "cuts" are in the projected rate of increase, and not in the actual amount of money now spent on Medicare services. Even with our proposal to slow growth, there will still be an increase of 2 percent in Medicare spending in FY 1988 and an average of 8 percent over the next 5 years.

Only 4 percent of slowed growth will impact beneficiaries in FY 1988. Ninety-six percent of the slowed growth will be borne by providers and other third parties. Most of the savings will result from new incentives for efficiency, for example, through eliminating inequities in Medicare payment for physician services and including additional services under prospective pricing systems.

Question. The Abington Memorial Hospital in Abington, Pennsylvania, reports that the proposed Medicare and Medicaid cuts would have a devastating impact on that facility, which is a 500 bed community teaching institution and Nursing School serving over 100,000 people in Eastern Montgomery County. I am advised that the School of Nursing, which currently has a budget of $1.7 million a year and operates at a $315,000 loss, would suffer an additional loss of $428,000 under the proposal. Such institutional are critical components of America's heatlh system. If the proposed cuts go forward, how could such institutions survive?

Answer. Medicare is only one supporter of hospital educational programs, contributing less than 40 percent to total direct medical education costs. Thus, it is unlikely that our proposal to reform Medicare payment for medical education by itself will result in Abington Hospital's decision to eliminate its nursing program. Increasingly, nurses' training is done through university baccaulaureate programs; training programs through hospitals have been decreasing. In addition, student assistance will be maintained through programs administered by the Department of Education and through resources from the Nursing Student Loan program revolving fund accounts.

Medicare payment for medical education costs was always intended as temporary until community support was forthcoming. Given the oversupply of health professionals, including nurses, we believe that the Medicare subsidy, can no longer be justified.

Long Term Care

Question. The Pennsylvania Nurses Association believes that catastrophic illness legislation must include coverage for the costs of long-term care in a nursing home or home health setting. What is your assessment of whether such costs should be included?

Answer. I would agree that the American people need to improve their protection against the costs of long-term care. However, I do not believe that the solution is a costly expansion of the Administration's catastrophic legislation for this purpose.

We know that long-term care is an expensive and complex problem. For example, in 1985 the nation spent roughly $38 billion on long-term care services for persons of all ages. To these amounts, one must add costs associated with induced-demand--i.e., the increased demand for services that would result from public financing. For the Department's special analyses, we estimated that induced demand would raise expenditures from 11 to 38 percent, depending on the amount of up-front deductibles and co-payments. Most analysts consider these estimates to be conservative.

It is also important to note that private sector solutions to the problem of long-term care financing have not been adequately tested. The Department's recent analysis of catastrophic illness costs

indicates that there are a number of private financing options which are feasible and potentially effective, but which are only now emerging. We believe the expansion of these options should be nurtured through a careful mix of public and private initiatives. In our view, development of private financing mechanisms will lead to a choice of suitable and affordable protective strategies for consumers.

Question. On January 28, 1987, you stated before the Senate Select Committee on Aging that elderly Americans require more medical care than younger persons and are more apt to suffer the consequences of an acute illness or need long-term care.

What is the evidence in support of this conclusion?

Answer. Attached are tables from Health United States: 1984, prepared by the National Center for Health Statistics, which are indicative of the use of health care by various age groups. The first compares frequency of office visits to physicians (Table 44); the second (Table 48) provides information on discharges from and days of care in non-Federal short-stay hospitals; and the third (Table 88) indicates charges and age distribution of users of nursing home care in the United States. These tables make clear the greater use of health care by the elderly.

Catastrophic Illness - Younger People

Question. Do you believe that we will need to enact catastrophic illness legislation in the future which would target younger persons?

Answer. I must give you a two part answer to this question. First, Congress has enacted legislation already which provides the basis for substantial catastrophic protection to many under age 65. It is the Federal-state partnership of Medicaid. All states have implemented programs providing the basic set of Medicaid services; in addition, many states have also taken advantage of the so-called "spend-down" option under Medicaid which is often of special help to the non-Medicare population.

In addition, the President directed the Department to work with the States to develop initiatives and innovations for providing catastrophic health protection to the general population under age 65. One option under consideration is "formation of state risk pools to subsidize insurance for those whose medical condition makes it prohibitively expensive or impossible to get insurance."

Leadership on state risk pools for uninsurable people has consistently come from the states

themselves. Six states currently have active risk pools of this type: Connecticut, Florida, Indiana, Minnesota, North Dakota, and Wisconsin. In addition, four more states are expected to begin operational programs this year: Tennessee, Montana, Nebraska, and Iowa.

This Administration applauds that leadership, and is interested in ways that the Federal Government can be helpful without being intrusive. I believe that Federal legislation in this area now would be decidedly premature. Enthusiasm and initiative is high in the states. They need to have the broadest possible flexibility in both timing and tailoring programs to their own particular circumstances. There will be time enough later on to make judgments about state responses and the best among several alternative Federal actions if necessary.

Definition of Catastrophic Illness

Question. Please define what HHS considers to be a "catastrophic illness?"

Answer. Substantial consideration was given to an illness-based definition of catastrophe. Because of the interaction over time between developments in medical science and specific disease states or conditions, it was determined that a disease- or illness-based definition would be constantly in flux. In order to establish a more inclusive, stable, meaningful, and operationally useful definition, the Department has turned to an expense-based definition. For the acute care catastrophic proposal, catastrophic illness expenses are considered to be those qualifying out-of-pocket medical costs above a significant and substantial or "catastrophic" threshold -- $2,000 in 1987. We did not have a similar threshold definition for long-term care or the general population under 65.

Questions Submitted by Senator Pete V. Domenici

MAGNETOENCEPHALOGRAPHY

Question. In the justifications accompanying the FY 1988 budget request for the National Institute of Neurological and Communicative Disorders and Stroke, the research applications of various brain scanning techniques are discussed. In that discussion, magnetoencepthalography, or MEG, is mentioned as being developed as a scanning technique in patients with partial epilepsy.

Is the MEG research you discuss that being developed at UCLA's Neuropsychiatric Institute under the direction of Dr. Daniel Freedman?

Answer. The NINCDS grant awarded to the UCLA Neuropsychiatric Institute (NPI) entitled, "Magnetoencephalography and Evoked Potentials in Epilepsy", is directed by Dr. William W. Sutherling of the Department of Neurology. Dr. Freedman is Executive Vice Chairman of the Department of Psychiatry at NPI.

Question. Can you summarize the thrust of current MEG research effort and what applications you have identified in your preliminary work with epileptic patients?

Answer. NINCDS scientists and grantees have demonstrated that measurement of magnetic fields produced by abnormal discharges in limited regions of the brain provides precise information concerning the location, depth, and orientation of an epileptic focus. This information serves as a guide to localizing the site for surgical control of medically intractable seizures.

In addition, Small Business Innovation Research Program grantees and contractors are developing more sophisticated instrumentation to measure these magnetic fields.

Question. Has NINCDS identified other clinical applications for the MEG technology at this stage of its research?

Answer. Initially, Institute projects have focused on epilepsy. However, MEG is also now being developed to study peripheral nerve function. Future clinical applications may include diagnosis of brain disorders such as tumors, trauma, stroke, or dementias.

SCHIZOPHRENIA RESEARCH

Question. In the report accompanying the FY 1987 Labor-HHS Appropriations bill, the Senate urged the National Institute of Neurological and Communicative Disorders and Stroke to develop research programs addressing schizophrenia and to jointly fund projects with the National Institute of Mental Health to pursue the possible organic causes of this serious disease.

Would you give this subcommittee your impression of the extent to which cooperation and collaboration is taking place between your institute and NIMH?

Answer. The two Institutes have a history of thirty-five years of cooperative interaction in the brain sciences. The intramural research programs of the Institutes have close linkages on the scientist to scientist level and there are several ongoing areas of scientific collaboration. Similarly the concurrent assignment of grants of interest to both Institutes has been accomplished over the years according to mutually agreed administrative guidelines which prevent redundancy and encourage coordination.

Basic neuroscientists apply the same fundamental skills and approaches when addressing research issues of brain development, structure, and/or function whether they work in mental health, neurological disorders or more generic neuroscience environments. NINCDS continues to support extensive research relevant to brain

structure, function, and dysfunction. It is the progress in this neuroscience research which forms the basic springboard from which the expanding research initiatives in schizophrenia are being launched.

NINCDS scientists are included in the working panels for the NIMH development of a National Plan for Schizophrenia Research. We will consider additional areas of research relevant to schizophrenia on the basis of recommendations made by the working panels.

Question. What specific projects, if any, are currently being undertaken jointly?

Answer. The major activity relevant to schizophrenia which shares support between the two Institutes is in the Positron Emission Tomography (PET) area where several projects of NINCDS PET centers involve studies of schizophrenic subjects. These studies address issues of quantative measurement of cerebral metabolism in the brain of the schizophrenic subject.

Question. How much funding is being directed to these joint projects?

Answer. One of these projects is a notable research program on regional brain function in psychiatric disorders at the University of Pennsylvania supported by NIMH for approximately $341,000 this year. It utilizes the extensive Positron Emission Tomography Center facility to which NINCDS presently provides over $2 million annually in grant support.

Similarly, another study on PET scanning in schizophrenia at Johns Hopkins University will receive some $395,000 in NIMH support this year utilizing the resources of the PET Center there which receives over $1,134,000 from NINCDS each year.

Question. If no joint projects have been started, how is the directive in the Senate report being complied with?

Answer. The NIMH has initiated an effort to develop a plan for expansion of research on schizophrenia. As these plans progress, extensive interaction with neuorscientists supported by NINCDS will occur and additional collaborative projects can be expected to develop.

Question. Does the NINCDS plan to begin schizophrenia research projects in association with NIMH in FY 1987?

Answer. We are awaiting development of the NIMH National Plan and the evaluation of responses to current NIMH Program Announcements and Requests for Applications recently published to identify additional opportunities for closer collaboration.

BUDGET REFORM

Question. Calls for budget reform are increasingly heard as budget deadlines are too often missed, important budget decisions are delayed, appropriation bills and other direct spending

legislation are held up in committee, and omnibus spending bills take the place of timely and orderly consideration of individual bills. One procedural reform that is being considered is the two-year budget cycle where budget and appropriations matters would be considered in the first year, and authorizations and oversight would be undertaken in the second year. Would your Department favor a biennial budget process? What benefits would your Department achieve in a two-year appropriation cycle?

Answer. We definitely favor a biennial budget process. This year we have requested two-year appropriations for the following accounts:

- St. Elizabeths Hospital
- Retirement Pay and Medical Benefits for Commissioned Officers
- Grants to States for Medicaid
- Payments to Health Care Trust Funds
- Supplemental Security Income
- Special Benefits for Disabled Coal Miners
- Payments to Social Security Trust Funds
- Family Support Payments to States

In addition, we have also included in our FY 1988 budget a request for advanced appropriations for the National Institutes of Health to fund outyear commitments generated by the award of FY 1988 competing research project grants. This would reduce the grantee's annual uncertainties over the availability of funding for noncompeting awards because funds would then be available for the total project period of a research project grant at the time it is awarded. This should also permit better fiscal planning and grants management.

Two major benefits to be obtained from a two-year appropriation cycle would be:

- the considerable savings in staff hours expended in budget preparation, hearings, reviews, etc.; and

- the absence of the end-of-year continuing resolution problem in the first year of the two-year cycle.

Question. Approximately what proportion of your annual appropriation request would you consider simply repetitious of the previous year's submission?

Answer. Except for the changing considerations of each Administration, the legislative proposals that evolve, and the changing economic assumptions, the budgets are quite repetitious. It is our estimate that 75 percent of the data contained in each annual budget submission is duplicative from year to year.

Question. What difficulties can you foresee in preparing and submitting a two-year budget to the Congress?

Answer. We did not encounter any major difficulties in developing the budgets for those accounts that were targetted for the two-year appropriation process this year. We would hope that this two-year process would be extended to all our accounts. The process would be rather simple because we currently prepare outyear estimates for all our accounts. The major problem in two-year budgeting in the current environment is the Federal deficit and the Gramm-Rudman deficit target. If larger deficits than forecasted were to occur during the first year of the two-year budget cycle, it would most likely be necessary to revise the budget for the second year through a supplemental appropriation action.

OFFICE OF THE INSPECTOR GENERAL

STATEMENT OF RICHARD KUSSEROW, INSPECTOR GENERAL

OPENING STATEMENT

Senator HARKIN. The subcommittee will resume its hearing. We will conclude our hearings on the administration proposed fiscal year 1988 budget for the Department of Health and Human Services with the testimony of the inspector general. Mr. Richard Kusserow, inspector general for the Department of Health and Human Services, has served in this capacity since June 1981. The Office of the Inspector General is responsible for audits, investigations, and program evaluations of the Department's several programs which represent a total budget of $361 billion.

Mr. Kusserow, please proceed with an oral summary of your opening remarks.

Mr. KUSSEROW. Thank you, Mr. Chairman. I am pleased to appear here today. This is my seventh trip before this committee. We are going to present the proposed 1988 appropriation for our office. For fiscal year 1988 we are recommending $78,439,000 in obligational authority, of which $40 million would be from the Social Security and Medicare trust funds. Our budget request also provides for 1,236 FTE's in 1988. In the last 7 years we have had a 12-percent reduction in staff but we have been able to increase our productivity by increasing the number of successful prosecutions, coming up with increased amounts of fines, savings, restitutions, and recoveries, and also increasing the number of sanctions against those people who would defraud or abuse our programs or our patients.

The rising return on your investment in the Office of the Inspector General can be seen in every facet of our operation. In fiscal year 1981 a $1 million investment in the OIG budget produced $4.6 million in fines, restitutions, recoveries, and other savings, as well as 4.5 judicial convictions and 1 administrative sanction. By fiscal year 1986 this same $1 million produced $75,400,000 in fines, restitutions, recoveries, settlements, and other savings, produced 13.7 judicial convictions plus 5.3 administrative sanctions. During the 5 years between fiscal year 1981 and 1986 your investment has increased the amount of cost savings to over $5 billion a year or 30 times that which was saved in 1981. We have also increased the number of judicial convictions by more than five times. We have had administrative sanctions increased by more than tenfold. And all this was done during the period of time in which we were averaging each year a 2-percent reduction in staff.

These results really, in turn, are a result of a major redirection of effort and methods to achieve our goals over the last few years. First, we reallocated our resources. Prior to my term, much of the resources were away from the major progams of our Department—the Social Security Administration and the Health Care Finance Administration—and focused primarily on grantees and nonprofit and university audits. We redirected that to focus more upon those two major programs.

In addition to that, we eliminated one of our major OIG components, consolidated the functions, and had a reduction of nearly 40 percent in management positions to eliminate some of the bureaucratic layering that had been in our office. We also broadened the investigative mission to go beyond being just criminal investigators to go into the civil and administrative area. We focused on returning unjust enrichment that may have been had by wrongdoers as well as punishing those people that engaged in criminal acts. We developed a system of better accountability in our own organization by focusing on good performance management and by emphasizing the use of computer-assisted audit investigative techniques to increase our capabilities.

We have also focused our investigations to deal with the systemic causes of fraud and abuse—not just with what we encounter—but to try to look and see what was it that gave rise to the opportunity for the fraud or abuse; then eliminate that. We have issued numerous management implication reports requesting that management make changes that would make the claimant less vulnerable to those kinds of problems.

Finally, we have had a very aggressive program to increase public awareness. We have established a hotline. We have developed a fraud alert system within the Department. We have focused our energy on alerting contractors, fiscal intermediaries, and Medicare carriers as to the kinds of problems that we are encountering and what actions they should take to improve that.

We feel that we can continue to improve productivity. I do not think we have peaked yet. We feel that, in spite of the fact that Congress is increasing the number of obligations on us to use the inspector general to enforce a lot of different new programs and new areas, we will still be able to continue producing on your investment in us.

PREPARED STATEMENT

With that, Mr. Chairman, I would like to answer any questions you might have.

[The statement follows:]

STATEMENT OF RICHARD P. KUSSEROW

Mr. Chairman and Members of the Committee

I am pleased to appear today to present the FY 1988 appropriation request for the Office of Inspector General. For FY 1988, I recommend $78,439,000 in obligational authority, of which $40,000,000 would be transferred from the Social Security and Medicare trust funds, and $38,439,000 would be from FY 1988 appropriations. Our budget request also provides for 1,236 FTEs in FY 1988. At these resource levels, the Office of Inspector General can continue to carry out its statutory responsibilities to protect the integrity of the Department's programs as well as the health and welfare of beneficiaries served by those programs.

During the past 6 years, we decreased our staffing level in order to do our part to reduce expenditures and make the Federal workforce more efficient. From FY 1981 to 1987, the OIG reduced staff levels by 163 FTEs, a decrease of 12 percent. As the chart on page 104 of the justification shows, in the 3 years between FY 1983 to 1986 alone we reduced by 150 FTEs.

Despite this staffing reduction, we did not reduce our ability to detect and prevent fraud, waste and abuse nor did we allow a diminution in the number of successful prosecutions of wrongdoers or in the amount of cost savings to the Department. In fact, for each year that we reduced staff, we increased accomplishments in every category. Last year alone resulted in increases in savings of over $400 million and in successful prosecutions and sanctions of over 70 cases.

From a budgetary perspective, perhaps the most significant of what we have accomplished is the rising return to the Department's programs and to the taxpayers that we have generated for the resources that the Congress invested in the OIG budget. The rising return on your investment in the OIG is evidenced in every facet of our operations.

In FY 1981, your $1 million investment in the OIG budget produced: $4.6 million in fines, restitutions, recoveries and other savings; 4.5 judicial convictions; and 1 administrative sanction. By FY 1986, the same $1 million produced: $75.4 million in fines, restitutions, recoveries, settlements and other savings; and produced 13.7 judicial convictions plus 5.3 administrative sanctions.

From another perspective, in FY 1981, an investment of 1 FTE in the OIG budget produced approximately $150,000 in total savings; 1/8 of a judicial conviction; and only 3/100 of an administrative sanction. That means it took 8 FTE to obtain 1 judicial conviction and about 33 FTE to obtain 1 administrative sanction. By FY 1986, the same FTE invested in OIG produced $4.4 million in cost savings; over 3/4 of a judicial conviction; and 1/3 of an administrative sanction.

Thus, during the 5 years between FY 1981 and FY 1986, your investment in the OIG budget has increased the amount of cost savings by over 30 times the amount saved in 1981; the number of

judicial convictions by over 5 times the 1981 level; and the number of administrative sanctions by 10 times the number imposed in 1981. All this was done with a staffing reduction averaging 2 percent each year.

Mr. Chairman and Members of the Committee, these results did not just happen by themselves. They are the measurable evidence of a carefully planned program we initiated in 1981 to improve productivity and to enhance product quality -- simply stated, to do more with less.

I would like to talk about that program. We began by re-examining the initial mission and purpose of the OIG under P.L. 94-505, our original statutory authorization. We refined our mission and purpose, targeted our objectives, and identified specific organizational goals and pathways to achieving those goals.

This process resulted in development of a long-range strategy which in turn was used by each or our operating components to develop technical annual work plans. Linked to the long-range plan and to the components' work plans, OIG managers developed individual employee performance plans which were used to establish and monitor achievement of operational goals.

The result of this process was a massive redirection of effort and the methods we used to achieve our goals. I would like to summarize some of the measures we used to enhance productivity and improve our outcomes.

First, we re-allocated our resources to better focus our limited budget on the largest program responsibilities of the Department -- those that present the greatest opportunity for fraud, abuse and mismanagement and which also offer the largest "payoff" potential: Social Security, Medicare and Medicaid.

We streamlined the organization to carry out our refined goals. We reduced the number of OIG components from four to three and decreased the number of regional offices from ten to eight. We closed local offices in locations where they are no longer cost effective and opened new ones in areas where there were greater opportunities for audits and investigations. We also decreased office space per employee.

We actively promoted the new management philosophy to all OIG employees. We changed the culture of the organization by emphasizing risk-taking approaches to achieve quality work products and increased measurable outcomes such as more convictions and higher dollar recoveries.

We expanded the use of civil prosecutions and administrative sanctions against those who defraud or abuse the Department's health care programs. We found that sizeable verdicts against wrongdoers could be achieved quickly, netting substantial recoveries, without the delays often occasioned by working through the court system. As the chart on Page 111 of the budget justification indicates, the number of sanctions imposed has nearly doubled in 3 years.

We developed systems for better accountability of performance. We took several actions to track the timeliness, quality and the actual output of our employees and managers, including tying employee performance plans to measurable outcomes and refining administrative standards and procedures manuals. We also computerized OIG, emphasizing the use of computer matches and other ADP techniques to detect illegal schemes or identify vulnerabilities in departmental programs and operations.

We motivated our employees to accomplish more. We developed employee performance plans that were related to our work plans. We rewarded employees for good performance through structured and publicized awards ceremonies. We have found that formal recognition of high performance motivates employees to strive for even greater achievements in the future. We also have been firm with those who did not produce. To help OIG staff "work smarter" and keep pace with new techniques in combatting white collar crime, we have provided not only comprehensive core training for auditors, investigators and inspectors, but also specialized training in problem-solving skills, statistical sampling techniques and effective writing.

We have harnessed investigations for fraud prevention. Through development of a Management Implications Report process, we have been able to use the findings of a single investigation to recommend far-reaching program or systems improvements. Frequently, a result of a single investigation provides ways in which we can eliminate opportunities for fraud in the future through management and organizational changes.

Finally, we have increased public awareness of what we do by establishing a hotline for individuals to report allegations of fraud, abuse or mismanagement. We have also developed a Fraud Alert system through which we make the Department's Operating Divisions and service industry agents, such as Medicare carriers, more aware of areas of vulnerability in the programs they manage. Each Fraud Alert identifies a particular vulnerability and recommends specific actions needed to minimize the risks to the involved program.

These measures are the reason for OIG's productivity gains and statistical achievements in the past 6 years. Yet, increasing productivity is an unending challenge. The gains we have made since 1981 have been possible only through constant assessing, planning and commitment. New methods for improving productivity must be developed to continue progress in FY 1988 and beyond.

I believe the budget we are presenting today will allow us to continue productivity enhancement. We are proposing, for example, $1.5 million in FY 1988, plus up to $500,000 in FY 1987, to increase the number of indirect cost audits of State and local governments receiving departmental program funds to insure the most efficient and effective management of federal dollars. We would conduct these audits with the help of auditing and accounting firms in the private sector, under our supervision. Use of private sector resources to do audit "legwork" frees OIG staff to concentrate on guidance and oversight, thereby increasing overall OIG productivity.

Similarly, for FY 1988 we propose an increase of 32 FTEs to partially carry out the new legislatively-mandated responsibilities summarized on pages 126 and 127 of the budget justification. By concentrating on entry level hiring in FY 1988 and by placing greater reliance on computer technology to aid in program analysis and white collar crime detection, we expect to absorb most of the cost of the additional 32 FTEs, thereby offering greater opportunities for increased productivity.

In summary, I believe the $78,439,000 and 1,236 FTEs we are requesting for FY 1988 will allow us to continue the strong record of productive achievements we have accomplished since 1981.

STAFF LEVEL

Senator HARKIN. So the increase you are asking for is $5 million over last year? I am sorry, $6.16 million over last year?

Mr. KUSSEROW. That is correct.

Senator HARKIN. And that translates into 1,236 full-time equivalents?

Mr. KUSSEROW. That is the total staff complement that we could have in fiscal year 1988 if our request is appropriated. Much of the increase that would be in there is a transfer of audit function from general departmental management. We are proposing in fiscal year 1988 that $1.5 million which had been used to do 1987 indirect cost audits in the States should be transferred to the inspector general. The administration felt that should be done. First of all, the law sets forth under Public Law 94–505, which established our office, that we are the auditor. We are responsible for all audits. By transferring it directly to us and overseeing that function we can be more efficient. Second, quite frankly, where the money had been, in general departmental management, it was used for purposes other than auditing the States. We have some $6 billion in the States that we are responsible for indirect cost audits.

So that is the major portion of the actual increase.

Senator HARKIN. And for the last 6 years you have had your staff levels reduced by 163 full-time equivalents?

Mr. KUSSEROW. That is correct.

Senator HARKIN. Has this been an annual kind of reduction? Is this the first time you are asking for a big increase?

Mr. KUSSEROW. The increase we are asking for is 32 positions. This will be the first that we have had in seven budget cycles.

NEW RESPONSIBILITIES

Senator HARKIN. How much did you ask for last year?

Mr. KUSSEROW. No increase. Quite frankly this is the first year I have asked for any increase. And the reason that we are really asking for it this year is that Congress was quite active in the last session to increase our workload. They passed the Program Fraud Civil Remedies Act, which is a civil sanctioning authority that we will have to staff up for to enforce. That basically is a civil and administrative alternative to criminal prosecution.

We also have been asked to exercise our civil and administrative sanctioning to better monitor the health maintenance organizations, HMO's. We have been asked—well, not asked. It has been legislated that we are to enforce the prohibition on the use of physician incentive plans. Our staff would be used to investigate that and sanction violators. We also have new requirements for sanctioning under Medicare part B for physicians. We have had additional workloads added in the Social Security area with regard to the Immigration Reform and Control Act, which we are the responsible party for investigating the misuse of the Social Security card and number. That is going to increase our workload.

We have had 10 or 12 new statutory requirements laid on us, and that would increase our workload. The 32 FTE's would only be a very slight partial compensation for the workload.

INDIRECT COST AUDITS

Senator HARKIN. The biggest program increase in your budget is what you described as indirect cost audits under OMB Circular A–87. As I understand it, you will be giving CPA firms a total of $1.5 million in fiscal year 1988 to audit State and local government agencies that received HHS program funds. Why are you doing this? Are not these reviews done by your own auditors? Do you not have the capability of doing that?

Mr. KUSSEROW. No; those are routine audits. We have a very small audit staff of roughly 650. That translates down to about one auditor for every half billion dollars in our Department. It would not be an efficient use of our own staff. These are routine type audits that we can purchase on the outside, which we can oversee and probably get a better return that way. The alternative to the $1.5 million would be appropriating us the $1.5 million plus increased staff so we can do the audits.

I do not think that is a necessary use of Federal audit resources. I think we can do that through contract audits. Traditionally our Department has done that, but it has not been in the inspector general's office. It is a decision by OMB. The fact is, that money had not been used to do the audits. Six billion dollars of the taxpayers' dollars are out there, and we know that there are problems that we are encountering. These problems include misallocation by some States as to the Federal portion of self-insurance funds, pension plans, and internal service operations such as the motor pools and computer centers. Basically, we will audit the unallocated overhead that goes into operating the Federal programs that the State is charged with administering. We think we can get a good return on these audits.

LEGISLATIVE IMPACT ON OIG STAFF LEVEL

Senator HARKIN. I have a question I will leave for Senator Chiles on Social Security furniture. He has an interest in that.

Mr. KUSSEROW. So do we.

Senator HARKIN. Well, I will let him come to that. You have said you have an increased workload due to the Immigration Act and Reconciliation Act. Are you confident that the $6.2 million and 32 positions will be sufficient?

Mr. KUSSEROW. It is only partial compensation. It is pretty hard to project exactly how much the legislation is going to impact on us. I will tell you we are going to have to reallocate some of our own resources to meet those new obligations as they get phased in, so I do not think that 32 will cover it. It will still require some juggling in our own shop to be able to meet those obligations. I am not even sure that represents one-fifth of what will probably be required. My feeling is, if I cannot

do the job with what I have, then I should come back to you next year and tell you why I am not doing the job. Then I will ask for more. But I am afraid I am a Presbyterian, and coursing through my soul is the Scottish ancestry of the church, and until I see there is a need I will not ask for more.

Senator HARKIN. I heard that your office was selected by GAO as one of the best three productivity managers in the Federal Government. All I want to say is congratulations. That is very good. That is exemplary.

Mr. KUSSEROW. Thank you. It is particularly so when you have a rival audit organization do the selecting on that, so we are pleased about that.

Senator HARKIN. I wish our inspector general in the Department of Agriculture were that way.

Thank you, Mr. Kusserow.

FURNITURE NEEDS IN SSA

Senator CHILES. It is good to see you. GAO has pointed out that the inspector general's report does have concerns about the Social Security Administration's computer furniture plans and the Office of Inspector General recommends actions that should be taken by the Social Security Administration to adequately determine the agency's furniture needs. What can you tell me about that?

Mr. KUSSEROW. I have not seen the final report. Of course, we are the liaison with GAO and we worked with them on the development of their report in this area. Our concern is that Social Security was not being entirely accurate in how they characterized that furniture. They were making it as part of the system modernization plan and we were not pleased with that. So, in working with GAO, and also with the Social Security Administration and the new SSA Commissioner, we want to rectify those issues which were found to be inappropriate and then ride herd to ensure that those corrections are, in fact, made. So we will be working closely with both.

SSA SYSTEMS MODERNIZATION PLAN

Senator CHILES. We had some questions yesterday and we were talking about the fact with the GAO report that we received the day before yesterday and we just released yesterday that the SSA had gotten $601 million for their systems modernization plan, that they had expended $335 million of that, obligated it, but of that $335 million only $147 million was actually requests that they had made. Do you audit things like that?

Mr. KUSSEROW. Very much so. I think that one of the unfortunate things—I used to teach government in a previous incarnation. One of the things that I taught in government that I will remember clearly is that it is unfortunate to leave an agency such as Social Security, which is the largest business enterprise in the United States, with somebody acting as commissioner for so long. When you look at that document in front of you, what you are really looking at is what happens when there is an immobilization in decisionmaking.

Fortunately, we have concluded a very protracted investigation of Paradyne, which resulted in guilty verdicts. That is good because it permits Social Security to get on with their business. During that time period of the investigation when the lack of someone who was actually in charge of the agency formally and officially, everybody was afraid to do anything. In that—we were very frustrated in the number of reports that we were issued saying that Social Security was going back and forth as to philosophy and how they went about developing the systems modernization plan.

I believe that with the new Commissioner, Dorcas Hardy, that particular problem, one of indecision, is gone. You will have somebody who is accountable, who will make decisions. When you do not have that, then the problem is that you get people further and further, deeper and deeper into the organization that will not sign off on things, will not make decisions because they are afraid to. And I think that is a manifestation of both the fear and the lack of decisions.

STATE-OF-THE-ART COMPUTER PROCUREMENT

Senator CHILES. A concern I have is that maybe the systems modernization plan may turn out to be a misnomer in that we continue to hear things that by the time they get this in, we are talking about part of it by the mid-nineties, and that it will be literally obsolete as far as being anywhere near state of the art. Now, for the life of me we are talking about the size of this agency and the size of this business. Any corporate structure that is beginning to put in its computers would be very concerned about making sure that they are setting a system up that is capable of being updated. It is going to be able to keep pace and all. Yet, from what I hear, by just the way some of these purchases are made and otherwise, you are going to have to throw it away and start over again. By the time it gets in it will be as far behind as where they are now.

Is there some way that we could get decisions made on the basis, as a good, strong business would, so that all of this would be so? That you can simply improve? That it raises the state of the art and you can keep plugging in things? Is it that way now?

Mr. KUSSEROW. Well, I think your perceptions are right on the mark. I think that the way it is set up and the procurement system, the way they operate in the civilian side of the government is such that you almost have planned obsolescence. The delay in acquiring new technology is so protracted that by the time you get the new technology you are two generations behind where you should be. I do not know if there is a complete answer to it, but I will say that if you are talking about a very, very large enterprise, you are talking about 20 cents of the Federal Government passing through Social Security. If they had the capability of making long-range development along the lines which you have a weapons system in the Defense Department where you could work through a single contractor, you might remain state of the art. But when you are operating on the procurement rules that we have

to work under, when you are dealing with something on such an enormous scope as the system modernization plan at Social Security, it is almost unbelievable what you would have to go through.

COMPETITION IN FEDERAL COMPUTER PROCUREMENT

Senator CHILES. I want to see competition. I believe very strongly in competition. Competition comes in several ways. One way is that you bid everything, but another way is that you literally compete at the front end. You have everybody come in, and then you have ways to continue to test as you go through to see that other people can buy in. It seems to me that is not beyond designing, and I wonder if it is the procurement rules or if it is where people just are not using their head in how they are using those rules. I cannot believe those rules would not allow you to set up a competition to determine who is going to be a long-range advisor and who is going to be the advisor that cannot supply the major hardware—that has to go out and bid as they go along.

Mr. KUSSEROW. Unless you have a mechanism along the line you suggest I think it is going to be a Herculean task to get something working. One of the unfortunate things I think that we are confronted with is that it is very, very difficult for the Government to compete with the private sector in terms of the kind of technical knowledge and expertise necessary to set up one of these systems. What we see is a constant frustration in finding the technical skills within Social Security that can monitor and can make these things work.

I think that, at a bare minimum, what Social Security has to develop is a single focus of responsibility within the agency to focus entirely upon systems modernization and nothing else. They need to keep some sort of continuity in the planning and development. I do not think we can afford this business of you going this way for a while, that way for a while, then you have a changeover. I think you need the continuity factor in that system modernization program. I am not sure how you could purchase, with the salaries that are paid, somebody on the outside doing the same job. With a lot less aggravation they would get paid two or three or four times as much money. I do not know whether you can purchase that.

PROBLEMS IN DEPARTMENTAL SYSTEMS IMPROVEMENTS

Senator CHILES. Many times the corporation does not start off having that. They decide who they are going to get to be their consultant or who they are going to get to handle this. FAA, you know, got themselves one company that was to be their consultant advise them as they went forward in their whole systems modernization. Yes; I think you need to pinpoint responsibility, but I do not know if you have to have the brightest expert in computer knowledge because I do not know whether you can get that either. But I think you could go through a process and select one of the top companies to be your consultant. You prohibit them from being able to benefit by purchases, but they help you arrange where you are going to go from there.

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Mr. KUSSEROW. Well, I think that is well worth exploring and trying to develop.

Senator CHILES. GSA does that with much of our buildings. Where they are going to go into a big building complex they will get one firm, architectural engineering firm, that helps set up how the procurement is going to run. They do that depending on what region they are in and who they think is out there. That firm is responsible for overseeing the job, but they do not get the job.

Mr. KUSSEROW. I will be pleased to discuss that with Ms. Hardy.

REPORT ON SYSTEMS MODERNIZATION PLAN

Senator CHILES. We would like to see that, and like to see some kind of study or report on that. I would like to get a report on that from you and see what we can do.

Mr. KUSSEROW. Also, if you like we will submit to the committee all the reports we had that related to the system modernization plan up to this point to make sure you have a complete set of all of our audits.

Senator CHILES. One of the other items about which we had considerable debate yesterday and asked GAO to testify on, concerned a project that happened to have been budgeted for five times. It appears the Social Security Administration did not obligate funds for the project, but they keep asking for it, and it still has not been obligated. We will show you that information. We would like to have your comments.

Mr. KUSSEROW. Again, I think part of that problem goes back to the indecision, the inability to make the decision to move forward. What you see is a waffling around in that item. It is the problem just lays there without moving. I think that——

Senator CHILES. That is one thing, if that is the case. The other thing is, if you literally ask and receive the money for the same item five times and you have never obligated it, then you are double counting.

Mr. KUSSEROW. I would be pleased to look into that.

Senator CHILES. When we get your response, we will put it in the record at this point.

[The information follows:]

LETTER FROM RICHARD P. KUSSEROW

JULY 17

The Honorable Lawton Chiles
Chairman, Subcommittee on Labor, Health
and Human Services, and Education
Committee on Appropriations
United States Senate
Washington, D.C. 20510

Attention: Mr. Jim Sourwine

Dear Mr. Chairman:

This is in response to a request from Committee staff to look into several aspects of the Social Security Administration's (SSA) Systems Modernization Plan (SMP). This letter provides preliminary results of our analysis of two matters regarding the SMP Information Technology Systems (ITS) budget: (1) the replacement of SSA's UNIVAC computer, and (2) the carryover of unobligated ITS funds.

We have concluded that SSA included requests for funds in fiscal years (FYs) 1983 through 1986 to replace its UNIVAC computer; however, there appears to be no misrepresentation on SSA's part in requesting these funds. With regard to the carryover of unobligated funds, we have concluded that SSA's estimate of $116.4 million to be carried over to FY 1988 may be significantly understated if all planned projects are not funded. Details follow.

Replacement of UNIVAC Computer

Our review showed that SSA included $3.2 million for replacement of the UNIVAC computer in the Presidential Budget requests for FYs 1983 through 1986. (The computer is used to process SSA administrative and management information.) However, the Operating Budget for each of these years properly reflected changes in SSA's plans. For example, in the first and second years, SSA was unable to carry out its plans because scarce personnel resources were concentrated on other more critical programmatic SMP projects. Accordingly, the Operating Budget contained no requests for funds for this project.

In the third year, SSA's strategy was changed from replacing the UNIVAC equipment to converting that equipment to be IBM compatible. The first phase of the conversion was completed in FY 1986 at a cost of $712,000. Later upgrades are planned but have been postponed until FY 1989 so as to allow SSA adequate time to complete the identification and assessment of available alternatives.

Although SSA planning is subject to question for initially requesting funds each year since FY 1983 but making no expenditures until FY 1986, there appears to be no misrepresentation on SSA's part in the budget process. Each year when the Presidential Budget was submitted to Congress, SSA planned to spend $3.2 million to replace the UNIVAC computer; however, when the Operating Budget was prepared some 8 to 9 months later, SSA realized that the replacement would not be started or completed as planned. Accordingly, SSA obligated less funds than planned and carried over significant amounts of

unobligated funds to the following year. As stated above, later upgrades have been postponed until FY 1989.

Carryover of Unobligated ITS Funds

The General Accounting Office (GAO) reviewed SSA's ITS budget request and obligations and reported in its March 10, 1987, fact sheet that SSA was carrying over significant amounts of unobligated ITS funds each year. SSA agrees with GAO that significant amounts of ITS funds were carried over. In its FY 1988 budget request, SSA made an appropriate reduction because of a large anticipated carryover of unobligated funds.

Specifically, SSA originally submitted a request to the Department for $342.8 million in new budget authority for FY 1988. The Department recommended that SSA reduce its request to a level consistent with that of the previous year, or $225.4 million. During the budgetary development period, SSA learned that it would have a higher-than-anticipated carryover and further reduced its request for New Budget Authority to $168.8 million. This amount was further reduced by an additional $3.4 million to reflect an OMB cut in systems improvements.

We believe that SSA's estimate of $116.4 million in unobligated ITS funds to be carried over to FY 1988 is understated, and could be as much as $175 million. SSA has historically underestimated the amount of carryover. Moreover, SSA anticipates protests to be filed on at least one of the major procurements scheduled for this fiscal year, thus delaying the awards.

We found that the carryover problems arose, in part, because of long lead times required when preparing budget requests, and frequent changes to the SMP. SSA begins to formulate its budget two years prior to the fiscal year for which funding is desired. Some 6 to 8 months after Congress approves the Presidential Budget, SSA submits an Operating Budget to OMB. The Operating Budget reflects changes in the SMP after the Presidential Budget is approved. Based on the Operating Budget, OMB approves SSA's spending plan. Subsequent changes made during the budget year require modification to the original spending plans submitted quarterly through the Department to OMB.

Other factors necessitating revisions to the operating budget and thereby contributing to large carryovers, are:

- lack of strong management control over the ITS budget process;
- frequent, disruptive changes in SMP direction by management;
- changes in the SMP caused by technology advances;
- several major procurements at amounts lower than estimated; and
- problems in plan implementation that caused project delays or cancellations.

SSA's request for New Budget Authority is based on its spending plan reduced by the estimated unobligated balance carried over from the prior year. Thus, SSA attempts to request only the amount of funds needed for current operations. However, each year, SSA obligated less funds than were approved for the ITS, resulting in significant amounts of carryover funds.

We have concluded that SSA complied with Department guidance in the preparation of Congressional Appropriations Justifications and Related Materials. Changes to SSA's Operating Budget exceeding 10 percent, or $500,000, were reported to OMB as required by OMB Circular A-11. Occasionally, OMB requested additional information in order to evaluate SSA's proposed modifications to its Operating Budget, and was satisfied with SSA's replies.

The differences in data shown in GAO's fact sheet, and those in SSA's response to GAO's fact sheet resulted from GAO's use of data from the Presidential Budget. As indicated previously the Presidential Budget is the first step in the budget process. Accordingly, the many changes to SSA's Operating Budget were not reflected in GAO's fact sheet. Nevertheless, GAO's point that there were significant amounts of unobligated ITS funds carried over each fiscal year is correct even though based on incomplete data.

We agree with GAO that the Appropriations Subcommittees should be better informed of any significant changes in the Presidential Budget. We believe that an improved level of communications between SSA and the Subcommittees would enhance this exchange of information. Also, SSA needs to better track item-by-item expenditures in the ITS budget. SSA's recent establishment of the position of Chief Financial Officer may result in improved controls over the ITS budget execution.

Some carryover of unobligated funds is necessary because of the procurement cycle applicable to ADP hardware. No-year funding is authorized to provide flexibility in implementing ADP projects. However, the need for no-year funds for all SMP-related projects is questionable and one that should be studied further. One consideration might be to limit no-year funds to certain expenditures, e.g., major hardware procurements, or contracts which require more than 1 year to award and complete.

* * * * * *

We are still gathering facts and analyzing data regarding your question on the status of software development for SMP. We will keep your staff apprised of our progress.

If you require additional information on matters discussed in this letter, please let me know.

Sincerely yours,

Richard P. Kusserow
Inspector General

QUESTIONS SUBMITTED BY THE SUBCOMMITTEE

Senator CHILES. We will have some other questions for the record that we will ask you and we appreciate your appearance here.

[The following questions were not asked at the hearing but were submitted to be answered for the record:]

Questions Submitted by the Subcommittee

HMO QUALITY OF CARE--MONITORING EFFORTS

Question. Mr. Kusserow, the Reconciliation Act of 1986 provided that the peer-review organizations will monitor the quality of care and activities of health maintenance organizations (HMOs).

Will the Office of the Inspector General perform any audit or oversight of the quality of care delivered by HMOs to Medicare beneficiaries?

Answer. The Office of Inspector General recently completed a service delivery evaluation to determine enrollee attitudes about services and medical care received from International Medical Centers (Florida), the largest risk HMO in the nation.

We plan to conduct a similar evaluation concerning enrollee attitudes toward service provided to beneficiaries in a sample of all Medicare risk HMOs. In addition, we will monitor the implementation of quality review procedures by the Peer Review Organizations (PROs) and other review entities to be awarded contracts to review HMO quality of care.

Question. Are there any sanctions that your office can impose on HMOs that are not in compliance with Federal law?

Answer. The Omnibus Budget Reconciliation Act of 1986 (OBRA) provides for the imposition of a civil money penalty (CMP) of up to $10,000 for each instance in which an HMO fails to substantially provide medically necessary items and services to program beneficiaries under such contracts. In addition, OBRA provides for an immediate sanction--i.e., suspending enrollment or payment for newly enrolled individuals or terminating the HMO contract--for violations of the requirement that at least 50 percent of an HMO's membership be non-Medicare or Medicaid enrollees.

Further, the Department is planning to use the PRO sanction process for those HMOs that are in violation of quality of care standards included in section 1156(a) of the Social Security Act.

At the present time, the Department is also considering four specific expansions to our CMP provisions with respect to HMOs. These expansions would allow the OIG to impose a CMP against any HMO that (1) charges Medicare beneficiaries more than amounts permitted under the program, (2) enrolls or disenrolls beneficiaries inappropriately, (3) screens program beneficiaries, or (4) misrepresents their private membership or Medicare enrollment. In addition, the Department has proposed a legislative change to increase to $25,000 the CMP against HMOs that fail to provide necessary medical care.

HOSPITAL INVESTMENT IN OTHER BUSINESSES

Question. The Washington Post recently ran an article about local area hospitals investing in other businesses in order to increase profits.

Has the Prospective Payment System reduced hospital profits to the point where hospitals have to diversify in order to survive?

Answer. None of the work that we have done indicates that hospitals need to diversify in order to survive. If they do so, that is of their own doing and not related to our recommendations.

Question. What have you done to monitor this aspect of hospital operations?

Answer. We have done two studies of the degree to which hospitals earn profits or incur losses under the Prospective Payment System (PPS). The first was completed a year ago and covered the first year under PPS, which was 1984. The second was finished just a few weeks ago and covered 1985, the second year under PPS.

In each year we examined a statistical sample of over 230 hospitals participating in Medicare under PPS. The results of each study are very similar--hosptitals are averaging 14 to 15 percent profit with an average hospital earning about $1 million profit each year.

Question. Have you made any recommendations to the Secretary, based on your findings?

Answer. Our study on the second year under PPS concludes that profits were high because the PPS Federal rate was based on overstated hospital inpatient operating costs.

GAO has also concluded that the data used to set PPS rates included the cost of unnecessary services and/or inappropriate cost elements.

We have asked HCFA to consider the PPS profits made by hospitals in recommending future increases in PPS rates during its annual updates. The Secretary has been briefed on the recommendations.

MEDICARE PHYSICIAN MALPRACTICE CASES

Question. On occasion, we all have heard about someone practicing medicine without a proper license, or about doctors who are sued repeatedly for malpractice, but who continue to practice simply by moving from one State to another. Obviously, this situation poses a real threat to the nation's Medicare recipients.

Are you working with the medical industry to correct these practices, and, if so, what have you done specifically?

Answer. The OIG has been very active in this area. In June 1986, we issued a program inspection to aid HHS and others to gain a broadly based and up-to-date overview of State medical licensure and discipline. That report included several recommendations to improve licensure and discipline.

Based on our report, HCFA has taken several positive actions: (1) urging hospitals to do more credential verifications and to report more cases to State Boards and (2) developing changes to its carrier instructions to require more extensive and timely reporting of case information to State Medical Boards.

In addition, the Federation of State Medical Boards has strengthened its disciplinary data bank. The American Medical Association (AMA) has also implemented new actions against incompetent physicians, including: (1) reviewing its 280,000 members and expelling any mem-

bers found to be incompetent; and (2) expanding the AMA Physicians Masterfile to make available records within a week of a request by a hospital, reducing possible delays in formulation of disciplinary actions.

Moreover, during the past year, 20 States have revised their laws to remove legal roadblocks to dealing with errant physicians.

Federal legislation requiring States to report disciplinary actions to HHS and allowing HHS to exclude from Medicare and Medicaid physicians and other health care practitioners whose licenses have been revoked or suspended by a State Board should be enacted as quickly as possible.

The proposed Medicare and Medicaid Patient Protection Act, HR 1868 and S 1323 were introduced but not enacted during the 99th Congress. We expect the bill to be reintroduced in the 100th Congress.

In addition, the Health Care Quality Improvement Act of 1986 (P.L. 99-660) requires the reporting of adverse licensing actions to HHS, as well as insurance malpractice claims and settlements and health care entity peer review actions. This data bank covers only physicians. The proposed Medicare and Medicaid Patient Protection Act bill would expand on the reporting of the licensing provision of P.L. 99-660 to cover other health care practitioners.

ALLOCATION OF RESOURCES

Question. The pie chart on page 109 of the justification indicates that you spend 60 percent of your staff resources on Social Security and Medicare, which represent only 4 programs of the more than 200 programs in the Department. This leaves only 40 percent of your resources, fewer than 500 FTEs, to cover the other 200 programs in the Department.

Is that the right balance?

Are you neglecting NIH, AFDC, Medicaid and other significant programs of the Department?

Answer. I believe that devoting 60 percent of our budgetary resources to the Trust Fund programs allows us to carry out OIG's responsibilities to not only Social Security and Medicare but to the other programs of the Departments as well.

The 60 percent effort in the trust funds represents the actual amount of effort for FY 1986. That amount may go up or down this year and in future years, depending on priorities that may arise in the future.

To allow for flexibility in being able to shift resources to unexpected priorities in non-trust fund related programs in the Department, we are requesting authority for trust fund reimbursements at the expected minimum level of effort only. In FY 1987, we are requesting only 55 percent. In FY 1988, only 51 percent is being requested. This is not to say that this is all we are going to do. For example, we may end up performing 65 percent trust fund work. But I do not want to be required to do 65 percent trust funds if we need to divert efforts elsewhere.

Through the contracting of non-government CPA firms operating under our strict guidelines, routine non-policy audits are conducted through the Department with much fewer Federal staff hours. In fact, in FY 1987 and FY 1988, the OIG will be expanding the use of contractors to support indirect cost audits of State and local governments that receive Federal funds through the Department's programs. Also, other government agencies perform audits for us under the single audit concept. Therefore, we are not neglecting the other significant programs of the Department.

HEALTH COSTS OF SMOKELESS TOBACCO

Question. More and more of today's youth are using smokeless tobacco, yet there is a growing concern about the adverse health effects from doing so.

Has the Office of Inspector General looked into this problem? And, if so, what are your findings and recommendations?

Answer. The Surgeon General requested the Office of Inspector General to conduct a qualitative field survey on smokeless tobacco use among youth. The study, based on a geographically diverse survey of 525 junior and senior high school students was structured to learn about: (1) type and levels of smokeless tobacco use; (2) use patterns and influences; and (3) youth awareness of the health risks of use and health effects resulting from use.

Some findings of the study are: (1) Smokeless users are predominately white males; (2) the most popular smokeless product is moist snuff such as as Skoal or Copenhagen; (3) State laws concerning purchase by a minor are weakly enforced; and (4) use starts early and is frequent and intense and has increased at a rapid rate in recent years.

We have recommended that: (1) the Surgeon General launch an educational public media campaign presenting smokeless tobacco as a growing national problem with serious current and future health consequences; (2) the Surgeon General seek funding support for basic research on smokeless tobacco usage; and (3) there be established an on-going national survey and data base on the incidence and prevalence of smokeless tobacco use by youth and adults.

SAVINGS PROJECTIONS

Question. How do you estimate the savings projections of $5.7 billion on page 102 of your justification?

Is this figure a compilation of many smaller audits?

Answer. The $5.7 billion estimate is based chiefly on our actual experience over the past 6 years in reducing fraud, waste and mismanagement throughout the Department and protecting the integrity of Social Security, Medicare, and other programs as well as the welfare of the millions of beneficiaries served by those programs. That estimate also assumes continued employee productivity and approval of the staffing increase of 32 FTEs proposed for FY 1988.

The FY 1988 savings estimate includes not only the sum total of savings resulting from individual audit findings of the OIG Office

of Audit, but also investigations completed by the Office of Investigations and inspections completed by the Office of Analysis and Inspections. Thus, our savings accomplishments are really the total of audits, of criminal investigations and prosecutions of wrongdoers and of inspections reports that detect and recommend changes to broader systemic problems with the Department's programs.

In each of these three approaches aimed at identifying and correcting fraud, waste and mismanagement, we expect to increase savings in FY 1988. For example, during FY 1988, we hope to achieve 1,550 successful prosecutions of wrongdoers who defraud Social Security, Medicare, and other Departmental programs, an increase of 50 successful prosecutions over the number anticipated for FY 1987 and 83 over the number achieved in FY 1986. Of the 1,550, 1,100 will be in court-order prosecutions through the judicial process and over 400 will be in administrative prosecutions through Civil Monetary Penalties and through other sanctions imposed on those who defraud the Department's health care programs.

WORKING CAPITAL FUND

Question. Mr. Kusserow, the Department's budget would require you, beginning in FY 1988, to pay $2.9 million to the Office of the Secretary Working Capital Fund in order to continue to receive certain administrative services.

Was this new assessment imposed on you or did you have an opportunity to review it?

Answer. I support the OS Working Capital Fund enhancement proposed in the FY 1988 budget. I participated in internal Departmental budget review group meetings where the proposal was presented and discussed.

Question. Do you agree with the idea of increasing the working capital fund?

Answer. I think the Working Capital Fund offers an opportunity for the Operating Divisions, as well as Staff Divisions like OIG, to know exactly how much they are paying for the administrative services that they receive from the Office of the Secretary. If the OPDIVs are not happy with the rate charged for those services, they will have the opportunity to buy those services elsewhere at a better rate.

Question. Will you be reviewing the fund as it is implemented?

Answer. The OIG would participate in the approval process to review the procedures for an annual audit of the fund.

Question Submitted by Senator Lowell P. Weicker, Jr.

VOCATIONAL AND EDUCATIONAL ACTIVITIES AT ICF/MRs

Question. Mr. Kusserow, it seems that it is still not clear as to whether or not the Health Care Financing Administration plans to allow Medicaid for vocational and educational activities in intermediate care facilities for the mentally retarded. You assured me,

back in 1985, that HCFA would not disallow the use of these funds "until the applicable regulations are clarified by the courts, by revision of the regulations or by further Department of HHS policy guidelines." Yet, both last year and this year the HCFA budget justification states that "the Department will also pursue disallowances for the use of Medicaid funds to provide vocational and educational acitivities offered in ICF/MRs."

I understand the Department has appealed a court ruling that these funds should be allowed and Dr. Roper, the HCFA Administrator has informed me that the Department anticipates a "favorable" ruling of that appeal.

Mr. Kusserow, should HCFA be disallowing the Medicaid funds absent a final court ruling?

Would you please look into this matter and report to me on the status of these funds?

Answer. The Health Care Financing Administration is not disallowing Medicaid funds for costs of vocational and educational activities in ICF/MRs. The inclusion of this item in the HCFA justification was an anticipation of a favorable court ruling on the Department's appeal. No disallowances will be made absent of a final court ruling.

GENERAL DEPARTMENTAL MANAGEMENT

Questions Submitted by the Subcommittee

Working Capital Fund - Administrative Change

Question. In FY 1988, you are proposing to reconstitute the Department's Working Capital Fund within the General Departmental Management function. What services are currently financed through the Departmental Working Capital Fund?

Answer. Currently the only function which is financed through the Working Capital Fund is reprographics.

Question. Which additional services do you propose to finance in the newly structured Working Capital Fund?

Answer. In addition to the existing reprographics function we propose to add the following services: correspondence control, the payment management system, accounting and finance services, regional administrative, cost allocation, and financial services, regional legal services, regional personnel services, payroll, the Washington personnel servicing office, and the EEO complaint investigation function.

Question. Why is this change proposed?

Answer. The Working Capital Fund (WCF) is a financing mechanism which allows us to bill individual agencies and bureaus for the centralized services they receive. This puts the burden of costs where it belongs. Also, it allows the Operating Divisions of the Department to have a choice in where they receive services from and, more importantly, the quality of services they receive.

Question. How will the change be administered? Do you anticipate any disruption in providing these services to the Operating Divisions?

Answer. The various operations of the Working Capital Fund will be administered on a day-to-day basis by the Staff Division Office Director, just as before the Fund was reconstituted. However, there will be a separate WCF manager to handle all negotiations with the Operating Divisions and to tend to other fiscal responsibilities required to operate a fund such as this.

There will be no disruption in the provision of these services as we move to the WCF mechanism at the beginning of FY 1988. There will be some special effort required to alter existing fiscal systems and organize the board. However, we believe that this will have no ill effect on the services or the recipients.

Staffing Levels

Question. The budget proposes a staffing level of 916 full-time equivalent (FTE) staff years, a decrease of 14 FTEs from the comparable Fiscal Year 1987 levels. How will this reduction be achieved?

Answer. The staffing reductions will be achieved through the development and management of hiring plans for the Office of the Secretary Staff Divisions and through automation of payroll and personnel services. Progress is also being made in our efforts to automate some budget and fiscal functions.

Question. Since 1981 you have reduced the size of the Office of the Secretary by over 30 percent. Have you had to reduce of stop any essential services since 1981?

Answer. The staff reductions made over the past several years were generally part of the Streamlining of the Office of the Secretary. This streamlining was carried out to reduce the inefficient and unnecessary duplication of effort in the Office of the Secretary as well as to lower the costs of the Federal Government. We eliminated or

decentralized functions which were no longer required to be concentrated in the Office of the Secretary. We have not stopped any essential services. We have reduced layers of management and have automated some functions in an effort to become more efficient and productive.

Question. What are your plans for the future?

Answer. We are continually assessing our operations in an attempt to increase productivity and to control costs. Our proposal to reconstitute the Working Capital Fund is indicative of our efforts in this area. However, we believe that improvements can still be made.

Question. Do you anticipate any future staffing cuts?

Answer. Staffing reductions are always possible. As our productivity increases through automation or management changes, some functions may no longer be necessary or appropriate for the Office of the Secretary. As our efficiency level improves, additional reductions may occur.

Question. Have you reached a level of optimum efficiency in your staffing levels?

Answer. As stated earlier, we expect to continually improve our levels of productivity and efficiency. Since improvements are still likely, our optimum staffing level has probably not yet been reached.

Financial/Administrative Integrated Management System

Question. What is the status of the Financial/Administrative Integrated Management System (FAIMS)?

Answer. Our attempt to implement a department-wide financial and management system is unfinished. In part this is due to problems in obtaining off-the-shelf software that is adaptable to Federal requirements. In addition, the computer industry did not have communications and other standards in place to allow cost effective implementation of an interactive, on-line data base system capable of processing high volumes of transactions from work stations located throughout the Department.

Question. Will you continue to develop and modify this system, or are you planning to use another automated financial system?

Answer. The Department continues to support the goals of the FAIMS project, but we are significantly altering our approach to benefit from experience gained over the past several years. We have implemented "pilot" systems throughout the Department to test and evaluate products and approaches. This will include applications for accounting, material support, management information and decision support.

Question. How much funding is requested in FY 1988 to support this function?

Answer. There are no funds included in our FY 1988 budget request for this function, other than salary and expense costs for the FAIMS staff.

Federal Employee Retirement System (FERS) Cost

Question. You have requested several million dollars department-wide for the cost of the Federal Employee Retirement System (FERS) in FY 1988. What happens if you do not need all of these funds that have been requested?

Answer. We have prepared estimates of the anticipated cost of FERS by using the same guidelines provided to all Federal executive branch agencies. The dollars which we have requested represent our best estimate of what FERS will cost us. Therefore, we expect that we will need all of the funds we have requested.

Question. What will your policy be? When will we be advised of your policy?

Answer. Our policies for financing and implementing FERS are still under development. The committees will be advised of our policies as soon as they are finalized.

Personnel Administration - Staff Cuts

Question. The FY 1988 budget proposes a reduction of 14 full-time equivalent (FTE) positions. Will you be able to reduce the staff without disrupting personnel services?

Answer. We expect to absorb this FTE reduction with no disruption of services by the continuation of restrictive hiring practices.

Question. What personnel services will be reduced as a result of this cut in staffing levels?

Answer. Since this FTE reduction will be achieved through restrictive hiring practices, staffing reductions will occur throughout the office of the Assistant Secretary for Personnel Administration. We expect, however, that no personnel services will be reduced as a result of this staffing cut.

Trust Funds

Question. Last year, four trust funds were tapped for $27.5 million to partially fund the General Departmental Management account. This year, in addition to the $7 million trust fund request, you are requesting $39.1 million from those trust funds to finance the Working Capital Fund.

Given the increase in trust fund support from $27.5 million to $46.1 million, do you devote that much of your resources to activities related to those trust funds?

Answer. We have not increased the level of trust fund reimbursement to the General Departmental Management appropriation through the Working Capital Fund mechanism.These are not new trust funds being transferred to GDM. Rather, they represent funds taken out of the GDM appropriation and transferred to the SSA Limitation on Administrative Expenses appropriation.

Reorganization (Family Welfare)

Question. Last spring the Secretary took the Office of Family Assistance out of the Social Security Administration and combined it with several offices into a new Family Support Administration. What has been accomplished by this change?

Answer. The Family Support Administration's mission is to serve as a focal point in the Department of Health and Human Services for programs that enhance and support the American family. By creating this new agency in April 1981, Secretary Bowen has demonstrated his commitment to the President's goal of Strengthening the American family unit. Consolidating family support programs in one agency strengthens program coordination, provides a single focal point of contact for States and other interested parties for their interaction with the Federal government, and permits development of uniform strategies to encourage self-sufficiency and reduce dependency of public resources.

Question. What is the status of the Office of Child Support Enforcement within the new Family Support Administration?

Answer. The Office of Child Support Enforcement remains a separate organizational unit within the Family Support Administration, with the Administrator of FSA serving as the Director of the Office of Child Support Enforcement.

Rent Increases

Question. The FY 1988 budget request includes a $1.5 million, or 13 percent increase for building space rent charges. If I am not mistaken, a similar increase occurred last year. What is the Department doing to control these costs?

Answer. For the past several years the Department has actively worked to reduce its space inventory and, therefore, its RENT budget. However, you must understand that RENT charges per square foot of space are not controlled by the Department. Each year these charges are determined by the General Services Administration (GSA) which notifies the Department of the budget year costs of its space inventory on a building-by-building basis. The Department, which has little or no input into this process, must pay these charges.

In the General Departmental Management appropriation RENT charges would probably rise by $1.5 million if the Department was not in the process of reducing and consolidating its space inventory. In our effort to reach the Reform '88 space utilization target of 135 sq.ft. per person by FY 1990, we will lessen our RENT costs by nearly $1.6 million by reducing over 50,000 sq.ft. of office and non-office space. In addition, our spending on related services (such as renovations) will also drop by more than $100,000.

Due to the efforts taken by the Department, our FY 1988 RENT budget will actually decrease by $237,000 even though our costs per square foot will increase by 13 percent. Our commitment to reducing space inventories and costs is beginning to yield savings. If the GSA RENT charges were not rising so rapidly, our savings would be even greater.

POLICY RESEARCH

QUESTIONS SUBMITTED BY THE SUBCOMMITTEE

POLICY RESEARCH PRIORITIES

Question. What are the Secretary's priorities for Policy Research in Fiscal Year 1988?

Answer. The major priorities for Policy Research for FY 1988 include:

- Work on the quality of health care to determine how to measure it, and on the quality of post-acute care to identify problems of access and adequacy of services after hospitalization.

- Continued work on catastrophic health care, principally for the non-Medicare population.

- Continued examination of ways to stimulate more competition in the delivery of health care services and other non-regulatory ways to control health care costs.

- Studies on Medical liability including a major survey of compensable liability events as directed by the Senate Appropriations Committee.

- Studies on welfare dependency and family-related issues in two principal areas: (1) assessments of employment and training programs for welfare recipients to help states implement the Administration's GROW and welfare demonstration proposals; and (2) studies for future reforms aimed at causes of welfare dependency, problems of families in crises and linkage to welfare, including examination of adolescent pregnancy, and paternity establishment.

- Work on long-term care issues, principally to (1) identify the ability of people to pay for such care out-of-pocket, (2) assess the adequacy of the supply of such care and what influences that supply; and (3) identify cost effective ways to expand access to community care.

Question. On Page 139 of your justification, you propose decreases in policy studies. Specifically, you are requesting a $500,000 reduction in quality of care studies and a $115,000 reduction in family policy studies. Are these cuts consistent with the Secretary's priority policy initiatives on the future of the family and improving the quality of care?

Answer. The reduction in our "Quality of Care" line item reflects the completion in FY 1987 of funding for a study in the liability/malpractice area. With FY

1987 funds, we are initiating a major study of compensable events to help identify the sources of compensation for injury and illness. While further work in this area might be appropriate, we believe it can be accomplished within our proposed level. Regardless, Policy Research funds represent only a portion of our Departmental research related to the quality of care. For example, the HCFA research budget for quality of care research has increased from about $3.0 million in FY 1986 to an FY 1988 request of $4.6 million.

Similarly, while the line item for Family Policy declines in FY 1988 slightly compared with FY 1987, we are focusing other portions of our Policy Research funds on what we consider to be key issues in family policy. For example, our effort in welfare dependency includes additional funding for, (1) a study of problems of family formation among poor urban blacks ($100,000) and (2) a $45,000 increase to our ongoing demonstration of innovative approaches to decrease long-term dependency among teenage parents. Again, as with quality of care, the Policy Research budget reflects only a portion of HHS spending on family related research.

LONG TERM CARE STUDIES - CATASTROPHIC HEALTH

Question. As you know, Dr. Bowen's plan for catastrophic health concentrates on the coverage of hospital acute care costs. And, so far, it seems that the Congress may initially focus legislative action on the acute care side of catastrophic health coverage.

-- What studies have you conducted to explore the long-term care side of catastrophic health coverage?

Answer. We have conducted a number of studies related to long-term care. These include a study of alternatives to institutionalization through a "channeling" demonstration of case-managed care; a nursing home survey; examination of the care of dependent elderly in the community and of the caregivers; and assessment of the costs and sources of financing for long-term care.

-- How have states provided for or managed catastrophic cost of long-term health care costs?

Answer. State financing of the costs of catastrophic care is limited primarily to its share of costs under the Medicaid program--which accounts nation-wide for approximately one-half of paid long-term care. There is substantial variation among states as to their coverage of long-term care under Medicaid. State efforts to manage long-term care vary also. A few states have initiated promising experiments and demonstrations directed to reducing inappropriate use

of nursing homes. We expect that state activity in this area will increase.

Regardless, paid care represents only a small portion of total long-term care. Most such care is provided without compensation by friends, family, and volunteers. We also will be working with the private sector on catastrophic care issues. We believe that better public information can have as its major result the effective building of market demand for innovative and currently unrealized protective approaches.

-- What recommendations have these studies proposed?

Answer. They contributed substantially to the report to the Secretary by the Department's Technical Work Group on Long-Term Care. They also provide the data base supporting major long-term care conclusions and recommendations regarding catastrophic costs, especially:

- o the need to educate the public regarding the risks and costs of long-term care and the limited protections currently available; and
- o the need to study incentives for the purchase of insurance and other means of private financing for long-term care.

NUMBER OF GRANTS

Question. There is a noticeable lack of detail in the budget justification regarding the number and types of projects to be supported by the $5 million request.

-- How many projects are you proposing to support in FY 1988?

Answer. Approximately 25

-- How many are new projects, and how many are continuations?

Answer. Of the 25 projects, 12 are new projects and the remainder are continuations.

-- What do you consider a good "new start" margin?

Answer. At least one third, preferably one half of the projects each year should be new; more if possible.

-- How many are competing grants?

Answer. In FY 1988, we plan that 80 percent or 20 of our projects will be performed under contract and 5 through grants. In both instances maximum competition is used in selecting contractors and/or grantees. Specifically, 3 of our 5 grants and 12 of our 20

contracts will be competed. Of the remainder most will be either continuations or interagency transfers.

-- What is the average length of time spent on a research project funded from this appropriation?

Answer. The average project runs 11 months. However, many of the projects contain multiple deliverables starting 3 months after award and continuing throughout the period of the project.

STUDY OF LIABILITY - RELATED INQUIRIES

Question. In last year's report, the committee directed HHS to work closely with the General Accounting Office in developing and analyzing demonstration projects to obtain national estimates of the incidence rate of liability-related injuries.

-- What is the status of those projects?

-- When do you expect the demonstration projects to begin?

Answer. We have met with staff from GAO and with representatives of the academic community. Based on this consultation, we are designing a project that will make a major contribution to the identification of injury compensation in the United States. We expect to award a contract to conduct the study by August of this year. This study will provide for a national survey of victims of illness or injury and will lead to reliable estimates of the incidence of illness and injury as well as an understanding of the types and amounts of compensation from a variety of differnt sources.

HEALTH POLICY RESEARCH - UNDERINSURED AND UNINSURED HEALTH CARE

Question. It is estimated that between 35 million to 40 million Americans under 65 are without health insurance. In addition, it is estimated that 10 million Americans have inadequate health insurance, or are underinsured.

-- What studies are you conducting to address these issues?

Answer. In helping prepare Secretary Bowen's report to The President on Catastrophic Health Care, we analyzed data from a variety of sources to identify among other things, sub populations facing particular risk of catastrophic out-of-pocket expense and the costs of various policy options to reduce the incidence of uninsured or underinsured Americans.

This fiscal year, the policy research budget will support continued research of this issue. A study is

planned to analyze a large insurer's claims to isolate instances of catastrophic illness, to identify patterns of illness that lead to catastrophic expense and to examine the relationship between variations in employer-based coverage and the incidence of catastrophic illness.

-- What recommendations have these studies proposed?

Answer. The primary recommendations from the initial work are included in the Secretary's Report to the President on Catastrophic Illness Expenses. For example, recommendations for the under-65 population include work with states to:

-- encourage formation of risk pools;
-- encourage flexibility in their Medicaid programs; and
-- expand employment related coverage.

OFFICE FOR CIVIL RIGHTS

Questions Submitted by the Subcommittee

DISCRIMINATION COMPLAINTS

Question. Every year your budget documents show that fewer and fewer discrimination complaints are received from individuals receiving HHS financial assistance or services. In 1981, the Department indicated that it received 1,900 complaints. Yet in 1988 you are only expecting 1,180, a drop of 38 percent. To what do you attribute this dramatic drop in new complaints?

Answer. In FY 1981, the Office for Civil Rights received 1,704 new discrimination complaints. The number of new receipts dropped sharply to 1,234 complaints in FY 1982. Since that time, the complaint workload has stabilized, averaging 1,165 new receipts annually between FY 1982 - FY 1986. In FY 1987 and FY 1988, OCR anticipates receiving an estimated 1,180 new complaints in each fiscal year.

We cannot be sure of the reasons for the decline in new complaints between FY 1981 - FY 1982. It is possible that at about that time the stimulus provided by the issuance of Section 504 regulations began to wane. These regulations, published in FY 1977, prohibit discrimination on the basis of handicap. In addition, during the past several years OCR has emphasized a preventive, pro-active enforcement strategy aimed at preventing problems of discrimination through voluntary compliance and outreach efforts. This may be a factor in stabilizing the complaint workload.

Question. How does the Department reach out to HHS program recipients to inform them about their civil rights?

Answer. OCR's voluntary compliance and outreach activities provide recipients of HHS funds with technical assistance so that they will adopt policies and procedures to prevent discrimination

problems from arising. Information and technical assistance are made available through training sessions, conferences, and workshops.

STAFFING REDUCTIONS

Question. The Office for Civil Rights staff has been reduced each year since the start of the Reagan Administration. According to my information, your 1988 staffing level of 355 full-time equivalent (FTE) positions represents a reduction of 150 positions - over 30 percent -- since 1981. Aren't you getting dangerously low in staff support to carry out statutory civil rights responsibilities?

Answer. It is true that since FY 1981, OCR's staffing authorization has declined substantially. This policy is consistent with the administration's objective to reduce the rise in federal expenditures. However, the positions authorized in FY 1981 far exceeded the fulltime equivalent usage, the standard used today. In addition, in large part the staffing reductions since FY 1981 mirrored the decline in the complaint workload so that OCR has been able to shift and redistribute resources to critical compliance activities other than complaint processing. For example, in FY 1981, OCR allocated 256 positions to complaint investigations and 112 positions to compliance reviews. In FY 1988, OCR will be able to process the complaint workload with 112 FTEs; as many as 78 FTEs will be allocated to compliance reviews. Because of the drop in the complaint workload, between FY 1981 - FY 1988 the total staff allocation to all compliance activities other than complaint processing has decreased only minimally. In FY 1981 OCR assigned 201 staff to compliance activities other than complaint handling, but in FY 1988 OCR will allocate 185 FTEs to compliance activities other than complaints. Finally, it should be added that a large proportion of the position and FTE reductions since FY 1981 have been absorbed in management and legal support areas. We believe the FY 1988 FTE allocation will enable the Office to continue a broad range of compliance activities.

Question. Are you planning to reorganize or downgrade the Office of Civil Rights in the future?

Answer. There are no current plans to reorganize or downgrade the Office for Civil Rights.

COMPLIANCE REVIEWS

Question. The Office of Civil Rights conducts compliance reviews of program recipients, usually large State agency programs, in order to insure that civil rights laws are being followed correctly. In FY 1986, you conducted 313 compliance reviews, completing 176 reviews. You are proposing to conduct 262 compliance reviews in both FY 1987 and FY 1988. Why are you proposing to reduce the number of reviews, with approximately the same number of staff?

Answer. OCR expects to initiate fewer compliance reviews in FY 1987 and FY 1988 than in FY 1986. The reason is that OCR has broadened the scope of a compliance review to embrace all statutory nondiscrimination requirements and all facets of a recipient's

operation. This means that on average more staff time will be required to complete a review.

Question. What is the average length of time to complete a compliance review?

Answer. In FY 1986, it took an average of 285 days to conduct a comprehensive compliance review.

Question. Of the 176 reviews completed in FY 1986, how many were found to be out of compliance?

Answer. Of the 176 compliance reviews completed in FY 1986, 132 reviews, or 75 percent, resulted in needed corrective action.

Question. How do you bring an agency or institution back into compliance?

Answer. If a violation is found during a complaint investigation or review, OCR negotiates with the recipient to achieve voluntary compliance, as required by law. If voluntary compliance cannot be obtained, necessary enforcement action is taken.

AIDS DISCRIMINATION SENATE HEARING RECORD

Question. Recently, a Federal court decided that AIDS is a disability for employment and insurance purposes. I know that the Office for Civil Rights is responsible for enforcing Section 504 of the Rehabilitation Act, which prohibits discrimination on the basis of handicap. Does the Department consider AIDS to be a disability for the purposes of enforcing discrimination in programs financed by HHS?

Answer. Yes, HHS does consider AIDS to be a disability under Section 504 of the Rehabilitation Act.

Question. Do you have regulations in place specifying your policy?

Answer. Yes. The applicable regulation is Section 504 of the Rehabilitation Act which prohibits discrimination based on handicap.

Question. About how many complaints have you received alleging discrimination on the basis of an AIDS handicap?

Answer. We have received thirty AIDS-based complaints.

Question. How many AIDS cases are under active investigation now?

Answer. Each of the thirty AIDS-based complaints we have received are in various stages of the investigatory process.

Question. Of the cases you've investigated, how many have you or the Justice Department taken legal enforcement actions, including going to court and terminating grantee funding, to protect the civil rights of AIDS victims?

Answer. None of the cases we investigated have been referred for enforcement action. In one case, we made a violation finding and this is currently under negotiation in the administrative enforcement process.

Question. If discrimination is alleged by a person who is merely considered or perceived to have AIDS, do you handle it as a civil rights matter?

Answer. Yes. The Section 504 prohibitions against discrimination include persons perceived as having a handicap.

SUBCOMMITTEE RECESS

Senator CHILES. The subcommittee is going to recess now until April 22, when we are going to hear from the Secretary of the Department of Education. Thank you.

[Whereupon, at 10:55 a.m., Thursday, March 12, the subcommittee was recessed, to reconvene at 9:30 a.m., Wednesday, April 22.]

DEPARTMENTS OF LABOR, HEALTH AND HUMAN SERVICES, AND EDUCATION AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1988

WEDNESDAY, APRIL 22, 1987

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 9:30 a.m., in room SD–192, Dirksen Senate Office Building, Hon. Lawton Chiles (chairman) presiding.

Present: Senators Chiles, Burdick, Harkin, Bumpers, Weicker, and Specter.

DEPARTMENT OF EDUCATION

OFFICE OF THE SECRETARY

STATEMENT OF WILLIAM J. BENNETT, SECRETARY

ACCOMPANIED BY:
BRUCE M. CARNES, DEPUTY UNDER SECRETARY FOR PLANNING, BUDGET AND EVALUATION
WENDELL L. WILLKIE, GENERAL COUNSEL

OPENING REMARKS

Senator CHILES. Good morning. The committee this morning will receive testimony from Secretary William Bennett in support of the administration's fiscal year 1988 budget request for the Department of Education.

Since January, when the President released his budget the Education Department proposals have received a good deal of attention. Many of us have already heard Secretary Bennett speak about his budget proposals.

We know that the fiscal year 1988 budget would cut education spending by some 30 percent. We also know that about one-third of all the domestic cuts proposed by the administration are in the education area.

A general consensus, I think, has developed in the Congress and in the White House that we must make America competitive again in world markets. Underpinning this effort is the need to ensure that we have the best educated and the most highly skilled citizens possible.

I am pleased that the administration has accepted the challenge to make America competitive again. Unfortunately the fiscal year 1988 budget seems, to this Senator, to have sounded the retreat.

Instead of encouraging high school students to go on to college, financial aid for college students is cut 45 percent. The list of other cuts is by now well known. Drug education funding would be cut 50 percent and vocational education would be totally eliminated.

Education for handicapped would be cut 15 percent; impact aid, 23 percent; and the libraries program, graduate fellowship, and the Nation's math science program would all be eliminated.

Mr. Secretary, we know your defense of this budget. We have heard you say it is a responsible budget in terms of what the treasury can afford and that under different circumstances you would have proposed a different budget.

I believe it is clear that when the Congress acts, the Department will have a different budget; greatly different than the one the administration has proposed.

BUDGET RESOLUTION

Soon we are going to be on the floor of the Senate with a budget resolution. As reported by the Budget Committee, it is approximately $6 billion higher for education than your proposal. It provides some $37 billion in deficit reductions and with the CBO's economic assumptions it has a 1988 deficit, which is less than the same one proposed by the administration.

OPENING REMARKS

A realistic level for education funding is a matter of priorities. We have been told that the educational reforms needed by this country are lagging behind, falling short, and slipping. We know that money alone cannot solve the problem. But we also know that cutting money will not solve the problem either.

Quality education is the bedrock upon which we hope to build our future. Better teachers, students with more opportunities, more parents more deeply involved in the education process. Our Nation's competitive posture demands a better educated and more highly skilled work force.

Mr. Secretary, while we might not agree with your proposals to cut education funding, we are pleased to have you with us today. I want to welcome you to the Appropriations Committee and call on Senator Weicker for his opening statement.

Senator WEICKER. Thank you, Mr. Chairman. We appreciate having Secretary Bennett and his colleagues appearing before the subcommittee today, and having the opportunity to explore with him the rationale behind the proposed fiscal year 1988 budget submission for the Department of Education.

This is a budget which many have labeled indefensible, also irresponsible, because of its overall reductions of more than 28 percent, com-

plete elimination of such important programs as library assistance, vocational education, numerous student aid programs, and reductions in special education and vocational rehabilitation.

Mr. Secretary, many view this budget as a complete retreat from the priority areas and populations of traditional Federal concern. But this is your opportunity to explain your budget and engage in a dialog with the subcommittee members. Thank you, Mr. Chairman.

Senator CHILES. Mr. Secretary, we understand you have some time constraints. I think 11:10 is the time you need to leave. We are going to try to get you out of here by that time.

Secretary BENNETT. Thank you. If I could just give an abbreviated version of my statement.

Senator CHILES. Yes, sir; we would be happy to put your statement in full in the record. And you may proceed.

Secretary BENNETT. It is about 5 to 8 minutes, if you will allow me. I appreciate the opportunity to appear before you, Mr. Chairman, members of the committee.

1988 BUDGET REQUEST

We are requesting $14 billion for fiscal year 1988. I acknowledge this is a tough budget. It is a lean budget, but we think it is a responsible budget in terms of what the Federal Treasury can afford. And it is a responsible budget for American education, for our children, their schools, their futures.

We have prepared a budget that helps meet the outlay targets set by the Gramm-Rudman-Hollings Balanced Budget and Emergency Deficit Control Act of 1985. We think too that we should not allow the reality of Federal budget cuts to distract us from the fact that spending has greatly increased in American education over the last 6 years. Total national spending for education has climbed steadily.

This Department's share, as you know, is less than 7 percent of that total. National spending on education was up almost $16 billion in the last year alone, to a total of over $282 billion. The $5.5 billion reduction we propose will be more than offset by a projected $14 billion increase in spending for education from other sources.

Clearly, and this point must not be lost, the American people are not underinvesting in education. They want quality. They are willing to pay for it. They have been paying for it.

For many years spending for education grew faster than just about any other part of the Federal budget, including defense. But more Federal dollars did not buy better educational results. Nevertheless, in the last few years we have seen some fairly substantial improvements.

Responsibility for those improvements lies not mainly with the spending of Federal dollars but with the broad-based nationwide efforts to raise standards, to concentrate on the basics, the return to common sense and a focus on what works in education.

I take great pride in the fact that although education is primarily a State and local responsibility, this administration has been at the forefront of the reform movement and a participant in it.

Mr. Chairman, while you and I may disagree, indeed I suppose do disagree over dollars, I would hope that we can find some common ground on principles. Whatever money the Congress appropriates, let us be sure to spend it on the right things and not the wrong things.

Let us put the emphasis in all Federal programs on the bottom line, on results. Let us build in some provisions for accountability and let us be sure that the taxpayers money is directed to where it is most needed rather than spread widely and thinly.

CHAPTER 1

Very brief summaries of some of our major programs. Chapter 1 of the Education Consolidation and Improvement Act is our largest single Federal program to aid the education of disadvantaged children. In 1988 we seek $4.1 billion, an increase of $200 million over the 1987 level. We think we have a good proposal and we are delighted to see interest in features of our proposal in the Congress.

EDUCATION FOR THE HANDICAPPED

Another priority for us is programs for the handicapped. We regard this as a Federal responsibility, to which this Department is committed. It ought to have a high claim on available funds even when other programs must be reduced and reduced substantially. In 1988 we are requesting $2.99 billion, a decrease from the 1987 appropriation but an increase over the 1986 level.

BILINGUAL EDUCATION

For bilingual education, an issue that is still much in the news, we are requesting $143 million, the same amount appropriated for 1987 and nearly $10 million over 1986. We again propose to the Congress that schools be given greater flexibility, to use whatever educational methods will best help their non-English speaking students learn English.

Public support for this position has grown dramatically in the past year. I urge the Congress to agree on the need to remove arbitrary restrictions on what is rightly a local decision.

DRUG-FREE SCHOOLS

During the past 2 years I have spoken about another issue you mentioned in your statement, the problem of drug use in our schools, and last year we proposed a $100 million Drug Free Schools Act. A similar bill, the Drug Free Schools and Communities Act was subsequently passed by the Congress.

Last month we proposed amendments to that act that will put real teeth in this important legislation. These amendments would require participating school districts to assess the extent of their drug problem, encourage districts to implement firm disciplinary policies concerning the sale or use of drugs, and require districts to monitor the effective-

ness of their Federal grants. We hope that these amendments will be looked on favorably.

Senator CHILES. Mr. Secretary, it was not just a similar bill. The Congress doubled the amount of money that you proposed.

Secretary BENNETT. Yes, sir.

Senator CHILES. So there was a little difference between the similarity. But this year you have gone back, and again gone back to what your proposal was.

Secretary BENNETT. That is right. We went back to our original funding request. But I would urge that whatever level of funding we have that we take a good look at those amendments, because we think they are good amendments and will put more teeth and accountability into the expenditure of those funds.

STUDENT AID

Student aid is obviously an issue of great discussion. We are requesting $4.5 billion for student aid. As in 1987 we will seek to concentrate our grant assistance on students in the greatest need and to reduce or eliminate Federal student loan interest subsidies.

The growth, the ready availability and the predictability of these subsidies have in my view played a role in enabling colleges and universities to raise their prices at double the rate of inflation over the past 5 or 6 years.

INCOME-CONTINGENT LOAN PROGRAM

We are requesting a major expansion of the Income-Contingent Loan [ICL] Program, seeking $600 million in 1988, which would provide to students nearly 500,000 new loans, with a substantial increase for loan limits and more flexible repayment terms. I believe that ICL's represent the single greatest advance in student aid in over a decade. We think expansion of this program is warranted.

STUDENT AID

We are also proposing several budget-related amendments to the Higher Education Act that embody sound principles. For example, we propose that in a needs analysis for all student aid programs, the cost of educational attendance allowance be limited to the previous year's tuition and fees increased by the inflation rate. And there are other provisions too. It is in my statement.

Let me summarize our student aid proposals. Access to higher education will be fully preserved. If a student was eligible for aid before, he or she would still be eligible, and for at least the same amount. The form of aid might change, but the resources would be there.

There are descriptions, Mr. Chairman, in the rest of my statement of our other higher education programs, but why don't I stop there. I think I have used my 5 minutes. I will also include the student aid, salaries and expenses, and the Office of Civil Rights statements for the record.

[The statements follow:]

STATEMENT OF WILLIAM J. BENNETT

I appreciate this opportunity to appear before you to discuss the 1988 budget for the Department of Education.

We are requesting $14.0 billion, which does not include the effects of recent Administration credit reform proposals. I acknowledge that this is a tough, lean budget. But it is also, Mr. Chairman, a responsible budget in terms of what the Federal treasury can afford, and a responsible budget for American education--for our children, their schools, and their futures.

We have prepared a budget that helps meet the outlay targets set by the Gramm-Rudman-Hollings Balanced Budget and Emergency Deficit Control Act of 1985. This legislation signalled that the President and the Congress are serious about the need to put an end to deficit spending. There is no doubt that the cure is strong, but to fail to reduce the deficit would prove ruinous to our Nation and our economy. Ultimately, it would be ruinous for our children, too. And so we must make reductions. Under different circumstances, I would be appearing before you with a different budget.

We must not allow the reality of Federal budget cuts to distract us from the fact that spending has greatly increased in American education over the last six years. Total national spending for education has climbed steadily. This Department's share is less than seven percent of that total. National spending on education was up almost $16 billion in the last year alone to a total of over $282 billion. The $5.5 billion reduction we propose in Federal spending for FY 1988 will be more than offset by a projected $14 billion increase in spending for education from other sources. Clearly--and this point must not be lost--the American people are not underinvesting in education. They want quality, and they are willing to pay for it.

For many years, spending for education grew faster than just about any other part of the Federal budget, including defense. But more Federal dollars did not buy better educational results. Recently, we've begun to turn things around. The decline in test scores has ended, teacher salaries are up, college endowments are growing as never before, and more young people are going to college than at any time in our history. Responsibility for these improvements lies not with the spending of Federal dollars, but with a broad-based nationwide effort to raise standards, to concentrate on the basics, and to return to common sense and a focus on what works in education. I take great pride in the fact that, although education is primarily a State and local responsibility, this Administration has been at the forefront of the reform movement.

The task we faced in assembling the 1988 budget was how to identify the necessary savings while, at the same time, maintaining essential Federal programs and encouraging needed education reform. Obviously, difficult choices had to be made, and we made them. In making our choices, we gave priority to programs that:

- benefit children at the elementary and secondary levels, because of the critical importance of the early years of schooling;

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- o enhance educational opportunity for the poor, the disadvantaged, the handicapped, and children with limited English-speaking ability;

- o improve the overall quality of American education through teacher training, more flexible block grants, and improved research and statistics; and

- o teach basic academic and literacy skills.

Mr. Chairman, while you and I may disagree over dollars, I would hope that we can find common ground on principles. Whatever money the Congress appropriates, let's be sure to spend it on the right things, not the wrong things. Let's put the emphasis in all Federal programs where it belongs: on the bottom line, on results. Let's build in tough provisions for accountability, so that if a program is not achieving good results, someone is held responsible for making improvements. And let's be sure that the taxpayers' money is directed to where it is most needed rather than spread widely and thinly. We owe it to the taxpayers, Mr. Chairman, to be more than just a conduit for cash. We've got to focus on what works.

Priorities and Initiatives

Chapter 1 of the Education Consolidation and Improvement Act is the largest and most important Federal program to aid the education of disadvantaged children. For 1988, we seek $4.1 billion, an increase of $200 million over the 1987 enacted level. As you know, we have transmitted to the Congress legislation to increase the program's effectiveness by strengthening State and local accountability for achieving results, providing incentives for successful programs, targeting funds on children and schools in greatest need, encouraging innovation and effective practices, and furthering parental involvement.

Another high priority in our budget is programs for the handicapped. I regard this as a fundamental Federal responsibility, one to which the Department is committed and one that ought to have a high claim on available funds, even when other programs must be reduced. Last year, the Congress passed large increases in appropriations, and imposed new requirements and created new authorities that needlessly burden the States with new Federal requirements. For 1988, we are requesting $2.99 billion, a decrease from the 1987 appropriation, but an increase of $235 million over the 1986 level.

For bilingual education, we are requesting $143 million, the same amount appropriated for 1987 and a nearly $10 million increase over 1986. We have again proposed to the Congress that schools be given greater flexibility to use whatever educational methods will best help their non-English speaking students learn English. Public support for this position has grown dramatically in the past year, and I urge the Congress to agree on the need to remove arbitrary restrictions on what is rightly a local decision.

During the past two years, I have spoken often about the problem of drug use in our schools and colleges, and last year I proposed a $100 million Drug-Free Schools Act. A similar bill, the Drug-Free Schools and Communities Act, was subsequently passed by

the Congress. Last month we proposed amendments to the Drug-Free Schools Act that will put real teeth in this important legislation. These amendments would require participating school districts to assess the extent of their drug problem, encourage districts to implement firm disciplinary policies concerning the sale or use of drugs, and require districts to monitor the effectiveness of their Federal grants. Third year funding to local school districts would be contingent upon demonstrated results. For 1988, we are requesting $100 million--the same as our request last year--to prevent drug use in our schools, colleges, and communities.

We are requesting $4.5 billion for student aid. As in 1987, we will seek to concentrate Federal grant assistance on students in greatest need, and to reduce or eliminate Federal student loan interest subsidies. The growth, ready availability, and predictability of these subsidies have, in my view, played a role in enabling colleges and universities to raise prices by double the rate of inflation.

We are requesting a major expansion of the income-contingent loan program. We are seeking a total of $600 million in 1988, which would provide to students nearly 500,000 new loans with substantially increased loan limits and more flexible repayment terms based on an individual's post-graduation income. I believe ICLs represent the single greatest advance in student aid in over a decade. Expansion of this program is clearly warranted.

We are also proposing several budget-related amendments to the Higher Education Act that embody sound principles. For example, we propose that in need analysis for all student aid programs, the cost of education allowance be limited to the previous year's tuition and fees increased by the inflation rate. We also will recommend tightening ability-to-benefit rules and the independent student definition. And we are seeking to increase the incentives for lenders to collect loans. Currently, more dollars flow to lenders than to students or institutions of higher education. Clearly, this is not the purpose of our student aid programs. We are proposing, therefore, to place a limit on the amount of funds that flow to lenders by reducing slightly the special allowance in the Guaranteed Student Loan program.

Let me summarize our student aid proposals. Access to higher education will be fully preserved. If a student was eligible for aid before, he or she would still be eligible, and for at least the same amount. The form of aid might change, but the resources would be there. Since the person who benefits should pay a fair share of the cost, and would continue the shift in emphasis from grants to loans, and we are asking that students pay the interest on their loans. The GSL program would continue to be subsidized, however, through payment of the special allowance. It needs to be understood that this shift from grants to loans has not caused college enrollments to decline; in fact, enrollments are increasing. Although loan burden has not deterred students from going to college, the inflexibility of current loan programs should be changed so that the burden is more manageable. An expanded Income-Contingent Loan program will create a more flexible and less burdensome repayment system than now exists.

Historically black colleges and universities have been one of the President's highest education priorities. For 1988, we request $50.7 million, which will help these schools build endowments and strengthen their academic programs. I am also proposing $5 million for the Minority Institutions Science Improvement program and over $170 million for Howard University.

Teaching basic academic and literacy skills is essential at all levels and is stressed throughout our 1988 budget. In addition to asking the Congress to increase funds for Chapter 1, which provides remedial instruction to school-age children, we are requesting $130 million for adult education programs--the highest level of funding ever for this program, more than 20 percent higher than the 1987 appropriation.

In order to improve the overall quality of teaching in American schools, we have proposed to the Congress our Christa McAuliffe Teacher Training and Improvement Act, with funding of $80 million in 1988. As we proposed last year, this broad-based, flexible authority will provide funds to improve the subject knowledge and skills of teachers and administrators in all fields. It will also support programs to attract, retain, and re-train the high-quality teachers we need to give our children the best education possible.

As you know, the excellent report of the National Governors' Association, Time for Results, called for a number of changes in the way we train, certify, and reward teachers. Other recent reports, such as that of the Carnegie panel, have made similar recommendations. Our Teacher Training and Improvement Act will be an important vehicle for initiating these much-needed reforms.

BIOGRAPHY OF WILLIAM J. BENNETT

POSITION	:	Secretary of Education
BIRTHPLACE AND DATE	:	Brooklyn, New York, July 31, 1943
EDUCATION	:	Williams College, 1965, B.A. University of Texas, 1970, Ph.D. Harvard Law School, 1971, J.D.
EXPERIENCE	:	
1985 - Present	:	Secretary, United States Department of Education
1981-1985	:	Chairman, National Endowment for the Humanities
1979-1981	:	President and Director, National Humanities Center, Research Triangle Park, North Carolina; and Adjunct Associate Professor of Philosophy, University of North Carolina, Chapel Hill, North Carolina
1977-1981	:	Adjunct Associate Professor of Philosophy, North Carolina State University, Raleigh, North Carolina

1976-1979 : Executive Director, National Humanities Center, Research Triangle Park, North Carolina

1972-1976 : Assistant to the President and Assistant Professor of Philosophy, Boston University, Boston, Massachusetts

1975-1976 : Academic Administration Internship Program, American Council on Education Fellows in Academic Administration, Boston, Massachusetts

1975 (Fall) : Speaker/Instructor -- In-service Training, Boston Police Academy, Boston, Massachusetts

1974-1975 : Associate Chairman -- Bicentennial Project, National Humanities Faculty, Concord, Massachusetts

1973-1974 : Chairman -- "The Question of Authority" Project, National Humanities Faculty, Concord, Massachusetts

1973 (Spring): Visiting Assistant Professor of Philosophy, University of Wisconsin, Madison, Wisconsin

1971-1972 : Associate Dean and Assistant Professor of Philosophy, Boston University, Boston, Massachusetts

1970-1971 : Tutor -- Social Studies, Harvard University, Cambridge, Massachusetts

1969-1971 : Resident Advisor (Dormitory), Harvard University, Cambridge, Massachusetts

1970 (Summer): Assistant Professor of Philosophy, University of Texas, Austin, Texas

1967-1968 : Assistant Professor of Religion and Philosophy, University of Southern Mississippi, Hattiesburg, Mississippi

1966 (Summer): Instructor, Governor's School, Winston-Salem, North Carolina

HONORS AND AWARDS :

Honorary Doctorate of Laws, University of Notre Dame, 1984
Honorary Doctorate of Humane Letters, Loyola College of Maryland, 1984
Honorary Doctorate of Humane Letters, Elon College, 1984
Honorary Doctorate of Humanities, University of North Carolina, 1984
Honorary Doctorate of Humane Letters, Manhattan College, 1983
Honorary Doctorate of Laws, Williams College, 1983
Honorary Doctorate of Humane Letters, University of New Hampshire, 1982
Honorary Doctorate of Humanities, Franklin College, 1982
Honorary Doctorate of Letters, Gonzaga University, 1982

STATEMENTS OF C. RONALD KIMBERLING

Student Financial Assistance

It is a pleasure to be here to present our budget request for the Student Financial Assistance account. Our budget request for fiscal year 1988 is $3,336,000,000--a significant commitment of Federal resources for student aid.

The Administration is proposing a major philosophical reorientation of the Federal student aid programs designed to restore the proper Federal role in the financing of postsecondary education. The dramatic growth of Federal appropriations for these student aid programs and the Guaranteed Student Loan program--from $3.7 billion in 1978 to $8.2 billion in 1987--has resulted in an excessive reliance on Federal student aid which abuses the spirit and intent of these programs as a supplement to, not a replacement for, other sources of college financing.

Our restructuring restores the traditional emphasis on the responsibilities of parents and students for financing college costs, supports educational access and choice of needy students by increasing their opportunities to borrow and by making loan repayments more manageable through a greatly expanded Income Contingent Loan program, reduces opportunities for fraud and abuse by tightening eligibility requirements, and reinforces the principle of cost-sharing with participating institutions. In addition, consistent with the Federal objective of helping provide equal opportunity for a postsecondary education, our 1988 budget request targets limited Federal grant assistance on the neediest students while making progress in reducing the Federal deficit.

To help implement this philosophy, the Administration is proposing a major expansion of, and a major increase in, our unsubsidized Income Contingent Loan program as an alternative to the excessively subsidized, fixed-repayment Perkins Loan program. The Administration is also recommending other legislative changes designed to restore the proper Federal role in financing postsecondary education costs that recognize that the student is the primary beneficiary of a postsecondary education. These changes would include reforms to the eligibility requirements for all Federal student aid programs by tightening the definition of an independent student and by eliminating an institution's subjective determination of "ability to benefit."

Income Contingent Loan Program

The major student aid proposal for fiscal year 1988 in the Student Financial Assistance account is to greatly expand the Income Contingent Loan program to an increasing number of postsecondary institutions. In support of this expansion, the Department is requesting an appropriation of $600 million--an increase of $595 million over the previous year. This increase, when supplemented with Departmental collections, institutional collections, matching contributions from institutions, and loan cancellation payments, would provide almost $1 billion of Income Contingent Loans averaging $2,000 to approximately 500,000 students. This would be a substantial increase over the prior year's $5.3 million to 2,671 borrowers.

The expansion of the Income Contingent Loan program would serve to establish the ICL program as a major component of the Secretary's long term design for Federal investment in student aid--a design intended to:

-- Assist students and parents to bear a more appropriate share of educational costs by making student loan repayment burden manageable, flexible, and as long-term as needed to accommodate individual post-school income circumstances. Loans would be repaid on a fixed basis at $30 per month, with an additional $30 for each additional $10,000 of debt, for the first two years. After two years, repayment would be related to the income of the borrower.

-- Institute program reforms and improve cost-efficiency by providing more student loans on an unsubsidized basis which ultimately would enable the fund to revolve indefinitely at no net cost to the Federal Government in providing loan capital. The borrower can choose whether or not to pay interest while in school, but interest will accrue at the average 91-day Treasury bill rate of the previous year plus 3 percent.

-- Facilitate higher education access and broaden institutional choice for postsecondary students under an institutionally-administered student aid program. Annual undergraduate borrowing limits would be increased from $2,500 to $4,000 for each of the first two years of academic study and from $3,500 and $4,500 to $5,000 for each of up to three succeeding years of undergraduate study. The overall aggregate limit would be increased from $17,500 to $23,000 for undergraduates. Graduate students could qualify for $10,000 per year of graduate study with a $50,000 cumulative for both undergraduate and graduate study.

Pell Grants

For the Pell Grant program, we are requesting $2.71 billion, the projected reduced program cost level which would result from the Department's proposals to restore family responsibility for financing education and to eliminate areas of program abuse and inequity. This amount would fully fund the program if our proposed policies were adopted, and would provide 1,923,000 students with average grants of $1,410. Awards to the lowest income students would not be reduced. Legislative proposals on which the reduced cost figure is based are:

-- Assessment rates for the assets and discretionary income of parents and independent students would be revised from current Pell rates to roughly the levels used prior to the enactment of the Middle Income Student Assistance Act of 1978. These traditional rates would effectively eliminate higher income families from eligibility for Pell Grant assistance while focusing limited Federal grant aid on the neediest students.

-- The family's expected contribution would be taken into account in all award rules. This would eliminate the inequity that currently exists in the Pell Grant program whereby students with different financial resources

attending the same low-cost institution receive equal awards, thus unfairly penalizing poor students. This provision would also preserve Federal grant assistance for the neediest students.

-- The maximum award would continue to be $2,100, up to 60 percent of educational costs. A $2,100 maximum award level would maintain current policy, is consistent with the fiscal year 1987 appropriation policy, and would provide a sufficient grant level to promote access to postsecondary education for low-income students.

-- The "living allowance" for room, board, books, supplies, transportation, and miscellaneous expenses that is calculated at the institution as part of the cost of attendance would be standardized to limit on-campus living costs and provide a more accurate assessment of actual costs for students living off-campus. Allowable costs for Federal student aid would include tuition and fees, plus a living allowance up to $2,300 for students living on-campus, up to $1,700 for students living with their parents, and up to $2,300 for students living off-campus but not with their parents.

-- A provision, added in the Higher Education Amendments of 1986, permitting an institution to adjust an individual student's expected family contribution or cost of attendance would be eliminated. This provision, if left unchanged, could result in uncontrollable program costs since it effectively eliminates the Secretary's authority over the operation of the Pell Grant program, particularly during a time of increased concern over accurate program cost projections.

Supplemental Educational Opportunity Grants

The Administration is not requesting funding for the Supplemental Educational Opportunity Grants program for fiscal year 1988. During a time of substantial Federal budget deficits, the allocation of Federal funds for student financial assistance must be targeted to those programs which focus aid on the neediest students and make the best use of limited Federal funds. Compared to other programs, such as the Pell Grant program, SEOGs are poorly focused on individual student need. A recent GAO report highlighted the fact that institutions across all educational sectors--public, private, and proprietary--awarded significant amounts of SEOG funds to students from family income levels above $30,000. Less than 1.5 percent of all Pell Grant funds were awarded to dependent students with family income levels above $30,000.

Work-Study

The Administration is not requesting funding for the Work-Study program for fiscal year 1988. Again, at a time of substantial Federal budget deficits, Federal student aid funds must be targeted to those programs where they are most needed. We encourage work opportunities for students, and in the current economic environment the outlook for employment opportunity has improved significantly, particularly part-time employment in the service industry which

provides excellent job opportunities for college students. Because growing numbers of private sector job opportunities are available, the justification for Federal funds in support of Work-Study programs is diminished. We also believe that schools will continue to make a large number of traditional work study jobs available because these jobs are necessary in school operations.

Perkins Loans

We are not requesting new Federal capital for the less flexible and more subsidized Perkins Loan program. It is not cost effective to provide new loan capital in a program so heavily subsidized. Institutions choosing not to participate in the Income Contingent Loan program may continue to make Perkins Loans from funds available in their institutional revolving funds. The Department does propose legislation to increase the interest rate on Perkins Loans to a rate equal to the Treasury bill rate plus three percent, and to require accrual of interest over the life of the loan. This would increase the number of loans that could be made to students in the future from the current Perkins Loan revolving fund.

State Student Incentive Grants

We are again requesting no Federal funding for the State Student Incentive Grant program for fiscal year 1988. The program goal of stimulating all States to provide need-based grants to postsecondary students has been accomplished. All States now have grant programs with most States considerably overmatching the Federal contribution. For example, during the 1984-85 award period, of 40 jurisdictions which overmatched Federal funds, 30 provided at least 75 percent more need-based grant aid than is required to match the Federal contribution. Nationally, more than $1.5 billion in State grant assistance was available in fiscal year 1985, with the Federal share amounting to only 5 percent of this total. State expenditures have continued to expand even as Federal funding has declined or remained at the same level. This suggests a considerable State level commitment and indicates that Federal funds are no longer necessary to encourage States to provide student financial assistance.

Rescissions

The Department is proposing $1,269,000,000 in 1987 rescissions to eliminate unnecessary spending and to direct Federal support to priority programs.

The Department's revised request for the Work-Study and the Supplemental Educational Opportunity Grant programs for fiscal year 1987 includes rescissions of $412.5 million in Supplemental Grants and $592.5 million in Work-Study funds. Federal funds should be targeted on programs such as the Pell Grant program which more clearly serves the lower income student.

The Department is also requesting rescissions of $188 million for Federal capital contributions under the Perkins Loan program and $76 million for State Student Incentive Grants. The Department does not support new Federal capital under the current highly subsidized and inflexible Perkins Loan program. The State Student Incentive Grant program has accomplished its objective of stimulating all

States to establish need-based grant programs and no further Federal investment is necessary.

Supplementals

The Department is requesting a supplemental of $287 million to be financed by transfer from the Guaranteed Student Loan account to the Student Financial Assistance account to help finance all anticipated costs in the 1987 Pell Grant program, plus all unfunded Pell costs from prior years. The funds proposed for transfer are in excess of the needs of the Guaranteed Student Loan account because 1987 costs are substantially lower than previously anticipated, primarily due to declining Treasury bill rates and related interest subsidy costs. The transfer would have no impact on GSL program operations.

The 1987 funding level of $3.9 billion for the Pell Grant program is insufficient to eliminate the cumulative funding shortfall and fully fund the program during fiscal year 1987. Estimated program costs of $3.862 billion are $62 million more than the $3.8 billion designated for 1987-88 awards. Current program estimates of the cumulative previous year's shortfall is $325 million or $225 million more than the $100 million designated in the 1987 appropriation for the shortfall. This results in a total shortfall of $287 million.

Summary

In total, our 1988 budget request would generate about $13 billion in aid to students, roughly the same level available over the last several years. Our proposals have been carefully designed to maintain the historical Federal commitment to providing access to postsecondary education for needy students, while eliminating unnecessary Federal spending on poorly focused and highly subsidized programs. Overall, there will be greater equity in awards, reduced program abuse, expanded educational choice, and a restoration of the traditional role of parent and student contributions.

I will be pleased to respond to any questions members of the Committee may have on our budget request.

Guaranteed Student Loans

It is a pleasure to be here to discuss the budget request for the Guaranteed Student Loan (GSL) account. Our revised budget request for fiscal year 1988 is $4.088 billion, compared with a revised request for 1987 of $2.717 billion. The $4.088 billion figure includes a budget amendment of $2.9 billion which reflects the subsidy costs in the current and future years for new loans. The original President's Budget request of $1.177 billion includes only fiscal year 1988 program costs and does not reflect the enormous subsidies that will be incurred in the future. The revised request level for fiscal year 1988 is based upon the Administration's recent proposal, the Federal Credit Reform Act of 1987, which was submitted to the Congress on March 12, 1987. This legislation is designed to provide Congress and the Administration with accurate measures of the benefits of Federal credit programs, to place their costs on a budgetary basis equivalent to other Federal spending, to improve the allocation of resources among credit programs and between credit and

other spending, and to provide for the efficient financing of obligations issued, sold, or guaranteed by the Federal Government. Nothing in the bill changes the credit programs that the Congress enacted or changes the existing authority of agencies to operate credit programs. The legal rights of students borrowing under the Guaranteed Student Loan program also remain unchanged.

The revised request level for fiscal year 1987 reflects a transfer of funds of $287 million from the GSL account to the Student Financial Assistance account for use in financing unfunded Pell Grant costs in 1987. The transfer represents unneeded funds due to lower Treasury bill rates than projected and consequently lower loan interest subsidy costs, and would have no impact on GSL program operations. Even after the transfer of funds, we estimate that an additional $525.9 million will be unneeded and carried forward to fiscal year 1988, assuming enactment of our proposals. Our request for $4.088 billion reflects the application of this carryover to finance projected fiscal year 1988 budget costs of $5.306 billion. If the supplemental is not approved, so that these funds are also carried forward, our 1988 request would be reduced to $3.801 billion.

We remain concerned over the excessively high costs in the GSL program as it is currently authorized. Indeed, between 1980 and 1985--during a period of general spending restraint and declining interest rates--GSL net obligations increased by 154 percent, from $1.5 billion to $3.9 billion. Net obligations in 1986 did decrease as a result of declining Treasury bill rates and changes introduced by the Consolidated Omnibus Budget Reconciliation Act of 1985, but still totaled $3.3 billion. In addition, despite expanded efforts to collect outstanding defaulted loans and reduce the incidence of default, default claims are expected to increase from an already excessive level of $1.241 billion in 1986 to $1.587 billion in 1988, an increase of over 600 percent from a level of $225 million as recently as 1981. It is indeed unfortunate to see that more than a billion dollars of the taxpayer's money goes toward paying off default claims, rather than supporting increased access to post-secondary education for today's students or reducing the Federal deficit.

The 1988 Budget Request

The 1988 budget strategy for the GSL program is consistent with our overall philosophy for student aid of restoring the responsibility of the parents and the student in financing postsecondary educational costs while ensuring that students have access to the capital they need to go to college. It also reflects our belief that many problems threaten the integrity of the program and undermine its equity and cost-effectiveness. We are proposing a number of changes in the GSL program which address these problems and achieve budget savings.

Our proposals are based on the following principles: that student borrowers, as the primary beneficiaries of the program, should bear their own loan costs; that the proper role of the Government is to support the creation and maintenance of a vigorous student loan market; that borrower costs should more closely reflect current credit market conditions; that Federal intrusion into the credit market should be limited to the degree necessary to ensure adequate access to student loan capital; that lender yield should be based

upon market conditions and not provide excessive profit margins; and that borrowers, lenders, and the participating States and territories should bear a share of the responsibility for financing the administrative and default costs of the program. We estimate that under our proposals, over $8.9 billion will be borrowed in 1988 by more than 3.5 million individuals.

Proposals Affecting Borrower Eligibility

So that borrowers would have additional access to loan capital, but without added Federal costs, we propose expanding eligibility for Supplemental Loans to Students and repealing all loan limits on Supplemental and PLUS loans. Any student would be assured of being able to finance his or her postsecondary education under our proposals. To ensure that Federal subsidies are allocated prudently, the Administration is requesting that regular loan limits be reduced to their pre-Higher Education Amendments of 1986 levels of $2,500 annual and $12,500 cumulative for undergraduates and $5,000 annual and $25,000 cumulative for graduates.

To limit further unnecessary borrowing of highly subsidized loans, the Administration is proposing to tighten eligibility requirements for students who claim they are independent of their parents. We are also proposing to require that students obtain a high school diploma or its equivalent by the end of the first year of enrollment in order to continue to receive Federal student assistance. This change addresses concerns raised by the General Accounting Office in their review of Federal student aid programs.

Proposals Affecting Borrower Costs

Currently, the borrower's interest rate for regular GSLs is a flat eight percent through the fourth year of repayment and 10 percent thereafter, although the Federal Government pays this interest while the student is in school and during grace and deferment periods. These rates remain constant regardless of current or future market conditions. This results in an unnecessary and inappropriate subsidy to students when market interest rates are high. Conversely, when market interest rates are low, borrowers are unfairly penalized by the non-responsiveness of GSL borrower interest rates to more favorable market conditions. Our proposal would set the borrower's interest rate on regular loans at the average of 91-day Treasury bill rates for the 12 months ending on November 30 prior to the academic year for which the loan is made. This rate would be fixed through the end of the second year of repayment at which time a new rate would be negotiated with the lender, either fixed or variable, subject to a cap of the prevailing 91-day Treasury bill rate plus 2.75 percent. These provisions would more closely tie the borrower's cost to prevailing market conditions, thus reducing Federal intrusion into the credit market and improving the efficiency of the program.

To further reduce Federal subsidy costs while ensuring that students, as the primary beneficiaries of the program, bear an appropriate share of the cost of the program, interest benefit subsidy payments made on behalf of the borrower during the in-school, grace, and deferment periods would be eliminated. Students would have the option of paying the interest as it accrues or borrowing additional amounts to cover the accrued interest. The current five percent loan

origination fee paid by borrowers to help defray interest subsidy costs would be eliminated.

Borrowers would be charged guarantee fees for both regular, Supplemental and PLUS loans. These fees, equal to nine percent on regular loans and two percent on Supplemental and PLUS loans, are necessary to cover estimated default and other Federal costs associated with each year's cohort of borrowers.

The current panoply of deferment categories would be replaced with a single hardship deferment. This would eliminate unnecessary program complexity and would ensure a fairer deferment system in which ability to repay would be the single test applied to all borrowers.

Proposals Affecting Lenders

The current GSL program provides lenders with a yield of 3.25 percent above the 91-day Treasury bill rate. Lenders receive this high variable yield for the entire life of the loan while still remaining 100 percent insured from the risk of default, death, disability, or bankruptcy. This yield is so attractive to lenders that many actively seek borrowers through advertising and direct mail campaigns.

We propose, beginning with the 1987-88 academic year, to revise the special allowance formula for new regular loans. Lenders would receive a total variable yield equal to the quarterly average of the 91-day Treasury bill rate--plus 2.75 percent while loans are in-school and through the second year of repayment. No special allowance would be paid on loans beginning with the third year of repayment.

To ensure that lenders share, to a limited extent, the cost of defaults, the Administration is proposing that loan insurance be limited to 90 percent of unpaid interest and principal instead of the current rate of 100 percent. This provision would encourage lenders to improve their loan servicing and debt collection procedures so as to minimize the incidence of default.

Proposals Affecting Guarantee Agencies

Guarantee agencies receive substantial financial support from the Federal Government to operate the GSL program. Currently, agencies shoulder little or no cost exposure for defaults. The average rate of reinsurance in 1986 was 96 percent; guarantee agencies shared in only four percent of default risk. Death, disability, and bankruptcy claims are reimbursed at 100 percent by the Federal Government. In addition, agencies are authorized to receive Federal administrative cost allowances equal to one percent of new loan volume, and to charge the borrower an insurance premium of up to one percent of the loan principal for each year the loan is outstanding. Guarantee agencies have received tens of millions of dollars in interest-free advances from the Department, and can retain as much as 35 percent of their collections on defaulted loans to cover collection costs. These payments allow the agencies to finance virtually all of their activities with Federal funds and still maintain excessive levels of reserve funds, according to General Accounting Office studies.

Our proposals would require that States and territories bear part of the responsibility for financing the administration of the GSL program and would encourage agencies to restrain administrative and default expenditures. This would be accomplished by revising the reinsurance provisions for regular, Supplemental, PLUS, and Consolidation loans. The maximum reinsurance level would be reduced from 100 percent to 90 percent of any default claim. For agencies with poor collection records, the reinsurance levels would be reduced from 90 percent to 80 percent or in some instances to 70 percent, depending on the ratio of the agency's cumulative net defaults to the cumulative amount of loans having entered repayment as of the end of the prior year. This new reinsurance formula would encourage guarantee agencies to prevent defaults and improve collections by imposing greater financial penalties than under current law for inadequate agency default and collection measures, by rewarding agencies for default collections, and by ensuring that agencies incur at least a small insurance cost for each defaulted loan.

In addition, reinsurance payments made to guarantee agencies after September 30, 1987 would be reduced to the extent that the agency's reserves exceed the greater of: 50 percent of reimbursements paid to that agency during the prior fiscal year, one percent of the agency's balance of outstanding loans as of the end of the prior fiscal year, or $500,000. This approach is modeled after suggestions in a recent General Accounting Office report and would reduce program costs and allow the Federal Government to recoup a portion of prior years' excessive Federal payments.

Agencies would also no longer receive direct administrative cost allowances. Elimination of the administrative cost allowances would require agencies to bear partial responsibility for financing the administration of the program. Agencies would still be authorized to retain up to 30 percent of default collections and to charge insurance premiums to help defray their administrative costs. These changes would provide more equitable cost-sharing between the Federal Government and the agencies while providing incentives for controlling administrative costs.

Other proposals to address defaults and improve collections include: requiring guarantee agencies to provide for insurance of Consolidation Loans as a condition for participating in the GSL program; selling a portion of the GSL defaulted loan portfolio to the private sector after all other collection efforts including IRS offset have failed; and extending the highly successful IRS income tax refund offset authority.

In total, the proposals I have outlined here would provide more access to and choice in educational opportunities for needy students through access to loan capital, while still reducing Federal costs by approximately $180.4 million in fiscal year 1987 and by $1,153.4 million in fiscal year 1988.

I will be pleased to respond to any questions members of the Committee may have on our budget request.

Statement of Bruce M. Carnes

I am pleased to appear before you to present our 1988 budget request for Salaries and Expenses for the Department of Education.

We are requesting $316 million, an increase of $22 million above the 1987 level of $294 million. Our request includes 4,450 full-time equivalent (FTE) employment, which is level with the 1987 ceiling. In addition, 50 FTE will be funded by the Indian Education appropriation, bringing the total for the Department in 1988 to 4,500 FTE.

Although stable between 1987 and 1988, the overall FTE level of 4,500 is 35 percent lower than the 1981 level even though the Department's total program budget grew 32 percent in the same period, from $14.8 billion in 1981 to $19.5 billion in the 1987 appropriation.

Higher productivity of employees and effective management have enabled the Department to perform all of its functions, which have been increased over recent years to include administration of new programs such as Magnet Schools, Science and Mathematics, and the Drug-Free Schools Act.

Our request level of $316 million for administrative expenses represents only 2 percent of the Department's total program budget.

Overall Request

In 1988, over 60 percent of our Salaries and Expenses request is budgeted for employee salaries and benefits, 19 percent for contract and automatic data processing expenses associated primarily with the student financial assistance programs, and 13 percent for rent, communications, and utilities expenses. Other smaller items, such as travel, supplies and equipment, account for the rest of the budget.

Almost half of our total requested increase for 1988 reflects the full-year effect of the January 1987 pay raise and the new retirement system even though our 1988 employment will remain level with 1987. The Federal Employee Retirement Systems will create a self-sustaining trust fund by increasing both employee and employer contributions. As a result, it will not be necessary to appropriate separately up to $16 billion each year for Government-wide civil service retirement costs. We were able to absorb a much smaller increase for the partial-year costs of both the 3 percent pay raise and retirement changes in 1987.

Other built-in costs and key programmatic initiatives account for the other half of the increase. General Services Administration rate increases will result in a $2.2 million increase in our rent despite planned office space reductions. Implementation of the Higher Education Act Amendments of 1986 is estimated to cost an additional $2 million above 1987 levels, largely for a toll-free telephone line service to provide information about Federal student aid and extra printing costs. Another $2 million is requested to develop training materials for student aid administrators in order to improve management of the programs by non-Federal personnel at the campus level. This training should reduce errors on applica-

tions and increase the effectiveness of the non-Federal student aid administrators.

We are requesting a $2 million increase as a one-time cost for purchase of our accounting software which we are currently renting. This one-time purchase will eliminate rental payments and thereby pay for itself in four years. Finally, we are requesting $3 million in one-time conversion costs for the processing contract for the Guaranteed Student Loan program and the Department's central computer facility. These conversion costs are necessary when new vendors win competitions and the old vendors continue to operate parallel systems until the new systems are fully installed.

Management Improvements

While administrative costs and employment have been held to a minimum, the Department has also implemented a number of management improvements in 1986 and 1987. As illustrative examples of these, I would cite:

- The collection of $130 million in student loan defaults through the IRS offset of debtors' income tax refunds. Over 243,000 defaulters had refunds withheld last year. The Department has set a goal of $200 million in collections through tax refund offsets in FY 1987.

- Other collection efforts, such as referral of over 30,000 default cases to the Department of Justice for prosecution, reporting of defaults to credit bureaus, and development of new regulations to assess defaulters for the extra costs of collecting their loans.

- Reorganization of a number of offices and functions, such as:

  -- the Office of Educational Research and Improvement, to improve management efficiency, responsiveness, and quality of research and statistics;

  -- the Information Technology Service, to provide increased ADP planning and oversight capabilities;

  -- oversight responsibilities for the Special Institutions, to ensure more consistent policy formulation and improved review of costs and operations by subject area experts; and

  -- consolidation of administrative budget management and program budget management in the Office of Planning, Budget, and Evaluation, to integrate the two aspects of budgeting.

- Implementation of an electronic program payment system developed by the Department of Health and Human Services, thereby saving contractor costs for producing a new system. Similar cooperative efforts with other Federal agencies have included the use of the Interior Department's payroll system and the Department of Agriculture's administrative payment systems.

- Acceleration of the distribution of $200 million in new drug education funds to the States by dispensing with writing new program-specific regulations. Given the emergency nature of the drug problem among young people, the State grant program under the Drug-Free Schools and Communities Act of 1986 will be administered under the statute itself and Departmental General Administrative Regulations.

Proposed Technical Changes

Underlying our request are two technical changes.

First, we propose the merger of the Office for Civil Rights and Office of the Inspector General accounts into the Salaries and Expenses account for the Department. This change will improve the Department's flexibility in managing resources while simplifying its account structure in a fashion consistent with our relatively small total employment requirements. The integrity and independence of the Inspector General's funding would be assured by establishing a floor in the Salaries and Expenses appropriations language which we are requesting in line with the 1984 report of the General Accounting Office (GAO) on Inspector General budgeting throughout the Government. The GAO recommended establishment of minimum funding levels through earmarks in appropriation language.

Second, our display of the Salaries and Expenses request in the 1988 President's budget identifies three activities: Program Administration, Civil Rights, and Inspector General. This display is consistent with current appropriation accounts. We also include three subactivities under Program Administration: Postsecondary Education, Other Education Programs, and Executive Direction. This will show more clearly the costs of major Departmental functions by differentiating the needs of program offices from those offices providing centralized support services. In displaying these activities for your information, however, we do not intend that they be the basis for funding limitations within the overall amount appropriated in this account. The one exception is the Inspector General, where budgeting independence is essential for ensuring objective operations.

Mr. Chairman, I thank you for the opportunity to present our request. My colleagues and I will be happy to answer any questions.

Statement of Alicia Coro

Thank you for the opportunity to present the fiscal year 1988 budget requested for the Office for Civil Rights (OCR).

The Office for Civil Rights requests a budget of $42,975,000 that will support a full-time equivalent (FTE) staff of 820. Of that request, $34.6 million, or 81 percent, is needed for salaries and benefits and $8.4 million, or 19 percent, is for expenses that include travel, contracts, supplies, printing, mailing, ADP equipment, and other services.

The requested FTE level of 820 is based on OCR's current estimate of annualized FTE usage. I believe this staff level in fiscal

year 1988 will permit OCR to enforce effectively the civil rights laws for which the Office is responsible.

Investigation and Enforcement Activities

In FY 1986, OCR received 2,648 complaints, 515 of which were from a single complainant, and closed 2,788 complaints, 641 of which were from a single complainant. Some of the complaints closed were received in previous years. During FY 1986, OCR received 382 complaints regarding race, color, and national origin, 643 alleging sex discrimination, 1,147 alleging discrimination of the handicapped, 51 alleging age discrimination, and 279 complaints alleging discrimination on multiple bases. Of the 2,648 complaints received in FY 1986, 146 concerned bases over which OCR had no jurisdiction; such as, height or weight. OCR had 887 complaints pending as of September 30, 1986.

OCR also initiated 196 compliance reviews and closed 209 reviews, some of which were started in previous years. OCR had 115 compliance reviews pending at the end of the fiscal year.

In response to questions raised at last year's hearing, I would like to emphasize some of our activities in enforcing Section 504 of the Rehabiiitation Act of 1973, preventing discrimination on the basis of handicap.

Section 504 Enforcement

During FY 1986, 19 cases were in active administrative litigation at the trial level. Of these cases, 11 involved violations of Section 504. Four of these administrative enforcement cases were against one State board of education. The issues under litigation include failure to provide a due process hearing to review changes in the placement of handicapped children; failure to provide an impartial appeals-level review of initial placement decisions; and failure to provide various groups of handicapped children with an appropriate education.

As of March 16, 1987, OCR had 23 cases in administrative litigation. Thirteen of these cases alleged discrimination on the basis of a handicap. Since my appointment as the Acting Assistant Secretary in January 1986, I have authorized the filing of a Notice of Opportunity for Hearing in 12 of the 23 cases. For example, on March 6, 1987, OCR filed a Notice of Opportunity for Hearing to begin fund termination proceedings against a large school district. OCR's investigation found widespread violations against Section 504 as well as the rights of limited-English-proficient, children. These violations are estimated to affect as many as 5,000 children. In addition to the 12 cases under Notice of Opportunity for Hearing, another case was referred to the Department of Justice.

I believe that OCR has been effective in carrying out its "enforcement" responsibilities under the civil rights laws, in implementing regulations, and in carrying out the Adams order. Complaints alleging discrimination on the basis of a handicap represent almost half of all complaints received by OCR. OCR's commitment to vigorous enforcement of Section 504 is demonstrated by the fact that during calendar year 1986, OCR initiated 625 complaint investigation cases alleging numerous violations of Section 504. Approximately 45 percent of OCR's total complaint workload for 1986 was devoted to Section 504

activities. The issue most frequently addressed in complaints was whether students were provided a "free appropriate public education."

OCR, in certain limited circumstances, employs a process which can be characterized as case-related technical assistance, known as Early Complaint Resolution (ECR). The Office for Civil Rights acts as a mediator between the complainant and recipient when a complaint is filed. In 1986, ECR resolved another 51 cases where a possible violation of Section 504 was raised.

By law, OCR is required to negotiate voluntary compliance where violations of Section 504 are found either as a result of a complaint investigation or compliance review. In 1986, OCR identified approximately 2,800 Section 504 regulat y violations, of which we were able to obtain corrective action in approximately 2,700.

OCR's success in negotiating voluntary compliance is reflected in the fact that remedies are obtained for a majority of such cases prior to the Federal government's investment of significant resources to litigate these cases. However, if voluntary efforts to negotiate fail, OCR can enforce Section 504 by either initiating administrative enforcement proceedings or by referring the cases to the Department of Justice. In 1986, OCR litigated 24 administrative enforcement cases, 14 of which involved Section 504 issues. The 14 Section 504 cases in litigation involve 54 violations of 22 separate sections of the regulations that implement Section 504.

The above record clearly demonstrates that OCR is enforcing Section 504.

State Higher Education Desegregation

Between 1968 and 1981, OCR investigated the public higher education systems in 18 States that had previously operated racially dual systems of higher education. OCR found that vestiges of prior segregation remained in each of the 18 States. By the end of FY 1984, four of the 18 States (Alabama, Louisiana, Mississippi, and Ohio) had been referred to Department of Justice for judicial enforcement, and by FY 1985, the remaining 14 States had submitted acceptable higher education desegregation plans.

The plans included a wide variety of State and institutional activities to enhance the traditionally black institutions; to desegregate student enrollment; and to desegregate employment in faculty positions, governing boards, and elsewhere. Each year, the States submitted annual reports on their activities under the plans, as well as statistical data for the OCR higher education surveys. OCR issued annual evaluation letters which highlighted areas where improvements were needed and suggested measures to make improvements.

In June 1986, a task force was established to review the implementation of the 10 statewide higher education desegregation plans that expired in the 1985-1986 academic year. The 10 States are: Arkansas, Florida, North Carolina (Community College System), Oklahoma, Virginia, Georgia, West Virginia, South Carolina, Missouri, and Delaware. During FY 1986, OCR conducted on-site reviews at each of the 254 institutions covered by the plans. After collecting hundreds of thousands of pages of material, the task force carefully reviewed the 5-to 8-year history of the plan implementation by each of the 10

States and prepared reports on their progress. On March 27, 1987, copies of these reports were sent to the Governors of the various States and made available to the public, the Congress, and the press. OCR will gather comments for 60 days so that we can ensure the accuracy and completeness of the reports and can benefit from the comments before making a final decision about whether, and to what extent, the States and their institutions comply with Title VI. An evaluation letter will be sent to each State describing what future efforts, if any, will be required.

Recent Judicial Decisions

Several significant events occurred in FY 1986 with respect to enforcement of Title VI of the Civil Rights Act of 1984 in elementary and secondary education. OCR obtained an initial decision from an administrative law judge that a school district's use of so-called "ability grouping" violated Title VI through its use of racially segregated classes and lack of educational justification. In another case, OCR initiated an enforcement proceeding against a similarly segregatory ability grouping system. A third proceeding against a discriminatory ability grouping system was settled during FY 1986 after a school district promised to implement substantial changes to enhance equal educational opportunity.

In a fourth case, OCR is continuing its Title VI administrative enforcement proceeding in a large city school district after the school district unsuccessfully sought to enjoin our proceeding.

Effect of Grove City

The Supreme Court's 1984 Grove City decision held that an entire educational institution was not subject to civil rights laws when only one program at the institution received Federal aid.

The Grove City decision has added an additional step to our investigations. OCR must determine if the discrimination alleged in a complaint took place in a program or activity that received Federal financial assistance. Notwithstanding this additional step in the investigative process, at the end of fiscal year 1986, the average age of pending complaints had decreased by 10 percent, and the number of complaints pending decreased 13 percent from the levels at the end of FY 1985.

The Administration supports H.R. 1881 as introduced March 31, 1987, by Representatives Sensenbrenner and Stenholm, which would overturn the effect of the Grove City decision on educational programs and activities.

In March 1987, the Office for Civil Rights reviewed the files of all cases closed in FY 1984, 1985, and 1986 for lack of jurisdiction. A preliminary analysis shows that OCR has closed or narrowed 834 complaints and compliance reviews -- out of over 7,500 received or initiated in the last three fiscal years -- due to the Grove City decision: 674 complaints were closed in whole or in part for lack of jurisdiction due to the Grove City decision; 160 compliance reviews were discontinued or limited.

Of the complaints that were closed, 468 were from a single individual who, during fiscal years 1985 and 1986, filed 688 complaints.

Leaving aside this single complainant's closures, OCR closed -- for lack of jurisdiction due to Grove City -- 206 complaints out of 6,111 received in the last three years. These cases would not have been closed for lack of jurisdiction due to Grove City had the Administration's legislation in this area been enacted in 1984.

Outreach Effort

In response to the directive in the Senate report accompanying the Labor, HHS, and Education 1987 Appropriations Act, OCR awarded a contract on February 6, 1987, to develop audio-visual outreach materials. The videocassettes to be produced will highlight the rights of handicapped and disabled individuals. The materials will be used for technical assistance to institutions receiving Federal funds and for general public awareness advertisements on television.

A public service announcement, to be issued in late spring, will provide post office box numbers so that people can write to obtain more information. OCR will send each respondent a booklet on Section 504. A cover letter will inform people of the availability of audio-visual materials and other pertinent information from OCR's nearest regional office. The letter will also state that if a group or school district officials want a personal technical assistance meeting, the OCR regional office will schedule one.

In addition, OCR has undertaken a number of management initiatives in technical assistance. These include: establishment of a technical assistance task force; regional training in technical assistance skills, focusing on the development and delivery of training courses and special approaches to problem-solving in the provision of technical assistance; and other activities designed to increase productivity in providing technical assistance.

OCR has also conducted a mass mailing of its Section 504 information pamphlet, "Handicapped Persons' Rights Under Federal Law," to approximately 26,000 State and local education agencies and institutions of higher education. The pamphlet includes a list of OCR's regional offices. A letter from the Acting Assistant Secretary for Civil Rights, included in the mailout, offers technical assistance by our regional offices, and announces that videotapes about Section 504 will be available in the near future.

The record shows that OCR is vigorously enforcing the civil rights laws in the most timely manner in the history of the Office.

Mr. Chairman and Members of the Committee, I will be happy to respond to any questions you may have.

STUDENT AID PROPOSALS

Senator CHILES. Mr. Secretary, we are familiar with the several student financial aid proposals which have the net effect of reducing student financial aid by $3.7 billion by putting more reliance on the market rate loans and greatly reducing grants.

By your own budget figures this would reduce awards by $3,019,000, and the net number of students aided would be reduced by 861,000. I noticed, as I listened to your statement, you are making it sound like we are going to have more people out there and yet your own figures show that you are going to reduce those numbers.

GAO STUDY OF STUDENT INDEBTEDNESS

I noticed in your statement that your proposals would make the repayment burden more manageable. That assertion is in direct conflict with the results of a General Accounting Office study that we are releasing this morning.

The GAO went to the University of Miami, the University of Florida, Miami-Dade Junior College, and Bethune Cookman. At each school GAO selected real student cases from three different income categories. A low-income category of parents having from $10,000 to $15,000 earnings, a middle income of $25,000 to $30,000, and a high-income category of $40,000 to $45,000. They rejected student examples that were at the extremes of either end of that.

STUDENT AID & REPAYMENT
FAMILY INCOME: $10,000 TO $15,000

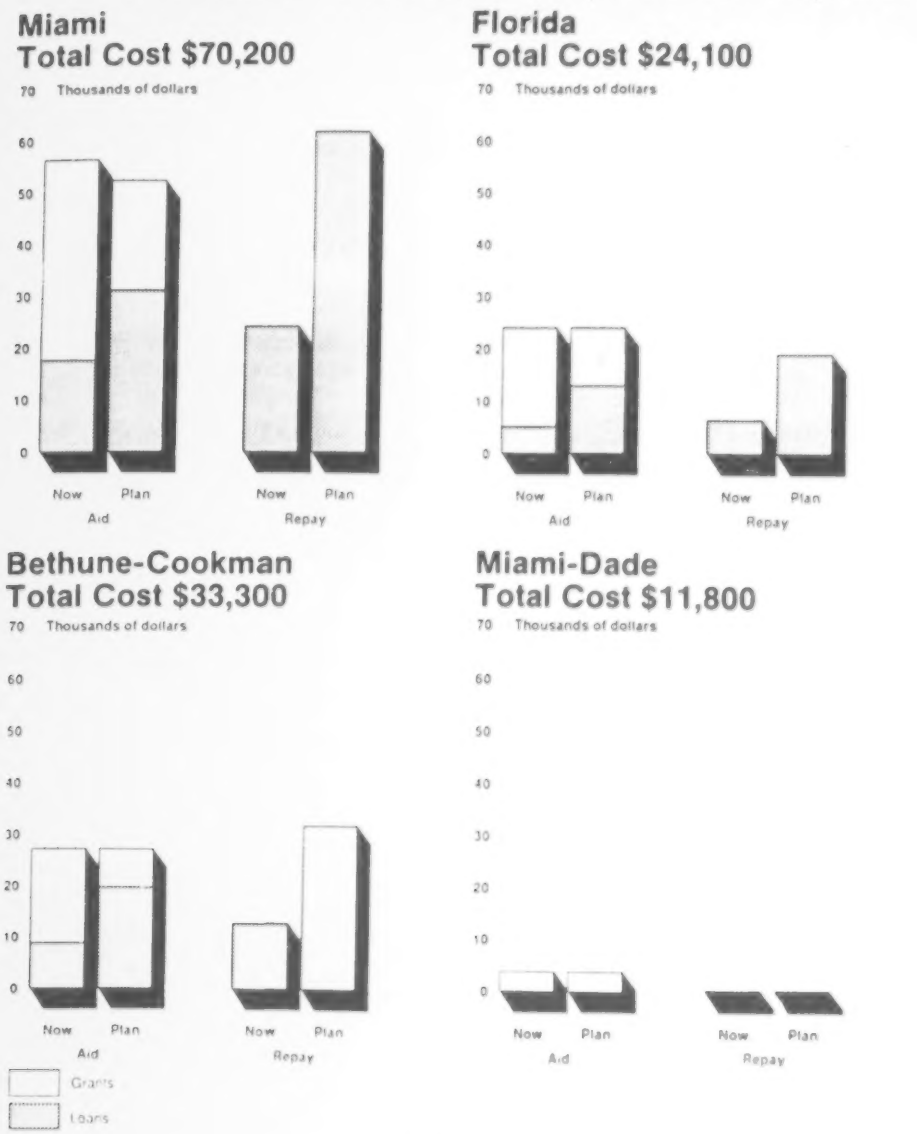


FIGURE 1

STUDENT AID & REPAYMENT
FAMILY INCOME: $25,000 TO $30,000
Miami
Total Cost $62,400
Florida
Total Cost $24,100
Bethune-Cookman
Total Cost $33,300
Miami-Dade
Total Cost $11,800
70 Thousands of dollars
60
50
40
30
20
10
0
Now Plan
Aid
Repay
Grants
Loans

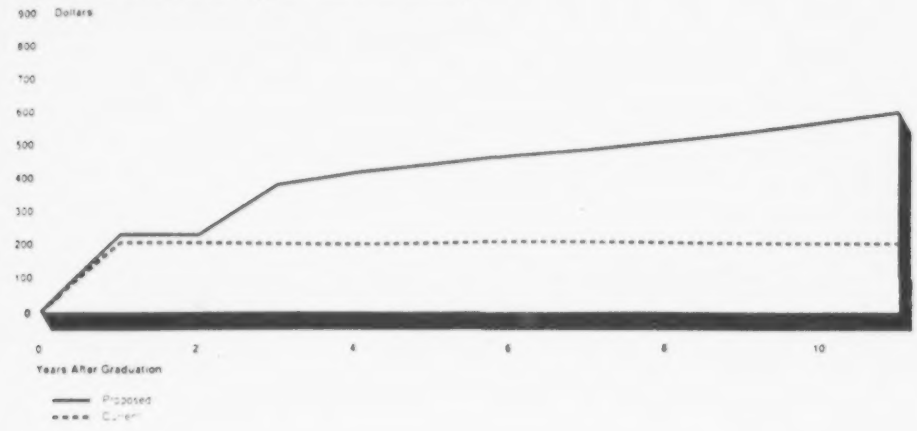
FIGURE 2

STUDENT AID & REPAYMENT FAMILY INCOME: $40,000 TO $45,000

FIGURE 3

MONTHLY STUDENT LOAN PAYMENTS - MIAMI

Lower Income (Social Worker)



Higher Income (Engineer)

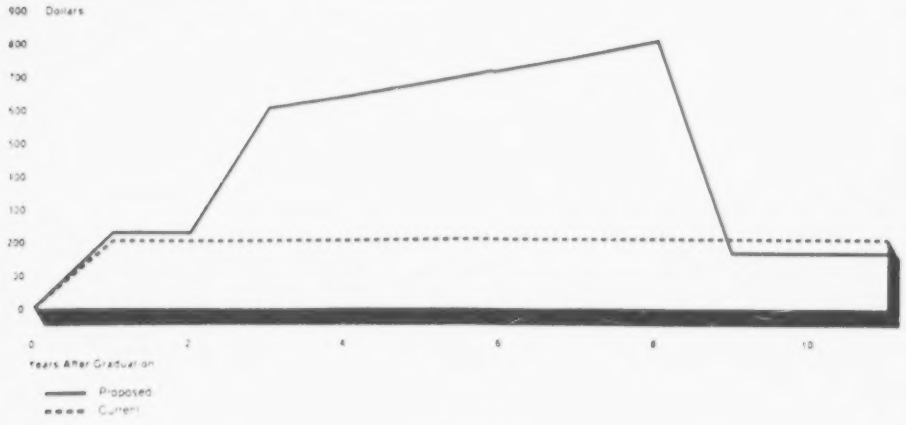
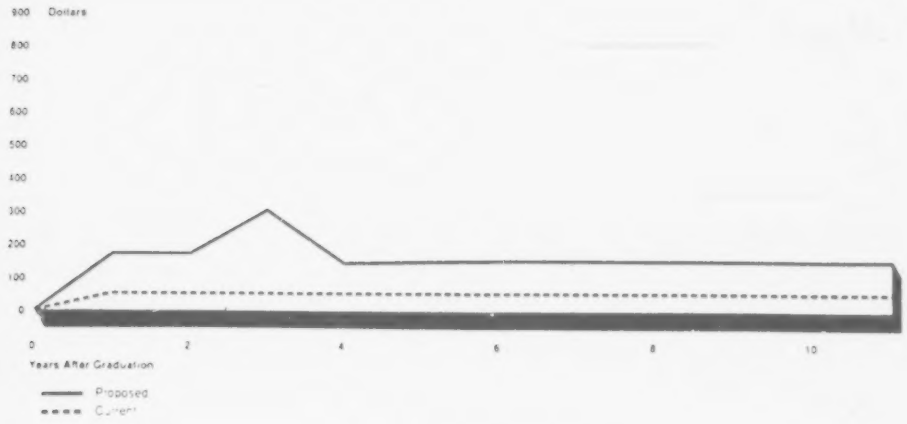


FIGURE 4

MONTHLY STUDENT LOAN PAYMENTS - FLORIDA

Lower Income (Social Worker)



Higher Income (Engineer)

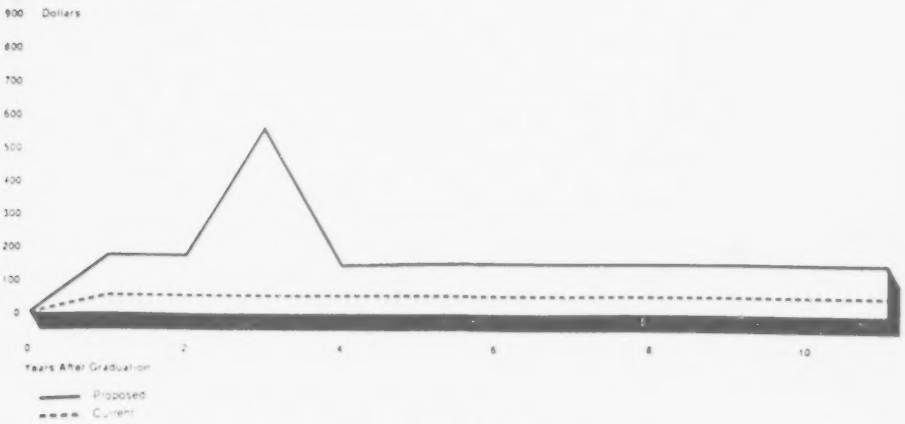


FIGURE 5

GAO FINDINGS ON STUDENT DEBT BURDEN

The results of the GAO study are indicated on these charts that are behind me. I think the situation for low-income families is particularly dramatic. One student from Bethune Cookman would have his loan as a percentage of total aid jump from 32 percent to 73 percent, and would have his repayment requirements at graduation jump from $12,000 to $30,000.

Another student from a low-income family, that is $10,000 to $15,000, attending the University of Miami, would have his loan repayments at the time of graduation jump from $24,000 to $53,000. Even if that was not bad enough, each of these students would pay back even more, the lower their income after graduation.

For example, one low-income family at the University of Miami would pay back $53,000 on a $31,000 loan package, if he graduated and became an engineer. If that same person—and that is the second chart there—if that same student became a social worker, over the years he is going to pay back not $53,000 but $61,000 on the same loan package of $31,000.

Now, the figures on the chart again will show you that basically this is what they would be paying back the way they are getting the loans now. Under the new proposal, that is the line that they will be paying back. And if it is an engineer, this is the way he will be paying back. That is the student at the University of Miami.

And at the University of Florida the pay back is like this. And for the engineer it is like this. Now for the life of me I do not see how you can say that this is going to level out the payments and yet that is the statement you have been making all around the country.

How in the world can you make a statement like that?

DEBT BURDEN UNDER INCOME-CONTINGENT LOAN PROGRAM

Secretary BENNETT. Well, two things. We certainly admit, Mr. Chairman, that we know an income-contingent loan program is a loan program, and that under our proposals indebtedness, loan indebtedness, will increase for some students. We have not denied that.

What we think is that under the ICL the repayment program and the repayment schedule can be fit more appropriately to a student's income. But there are a couple things——

Senator CHILES. Your term is more manageable. Now do you think that is more manageable? I mean, can you make that, I mean let us say what you want to about whether you think they ought to pay more for their interest rates, whether they ought to be on the market rate. But if you look at those particular lines, you know, do you think it is fair for you to go around the country, and that is what you have been doing, and making statements that what we are proposing is going to be more manageable for the students? Now that is just not true.

GAO STUDY—PROGRAMS EXCLUDED FROM STUDY

Secretary BENNETT. There are a couple other things in my answer that I would like to mention, Mr. Chairman. We found very interesting in the GAO study two things, which bear significantly on this.

One, the GAO study conveniently left out a couple of Federal programs—the PLUS and SLS programs—in their review. That would not change the fact that students would be indebted for those loans. But we think a fair analysis would not leave out two of our major loan programs.

But the other thing, we were very interested to see in this GAO study good strong evidence of just what we have been talking about around the country.

GAO FINDINGS ON SUBSIDIES PROVIDED BY UNIVERSITIES

You have indicated that they did this study for students at low income, middle income, and high income. I hope you noticed the subsidies provided by the institution, in the case of the University of Miami, for the students at different levels.

The students who are most heavily subsidized by the University of Miami, in this case, are the students at the highest income levels. And this is something we have been saying and wondering about.

Federal student aid is tied to individual need. We think that if the institution would tie its aid to individual need as well, that is, look toward its lower income students, you would see a flattening out, a lowering of student indebtedness.

It is a fine institution, the University of Miami, but why is it most heavily subsidizing its higher income students rather than its lower income students? Why does it not track the kind of principles that we have in Federal student aid?

And this was not our evidence, Mr. Chairman, this was the GAO study. I hope you are taking a close look at that part of it too.

Senator CHILES. The thing I like about you, Mr. Secretary, you may be wrong but you are never in doubt.

Secretary BENNETT. Oh, I have my doubts, but I think you ought to have your doubts, too, about that study. I mean, you present these charts up here——

Senator CHILES. Mr. Secretary, what I do not have any doubts about, and what I do not think I am wrong about, is that for you to try to say that you are going to level off and make more manageable the payments by this program which is going to take $3 billion out of student aid, is just totally without foundation and without merit.

GAO STUDY METHODOLOGY

Mr. CARNES. Mr. Chairman, may I respond to your point there, if I could please? We just received a draft copy of this report last night. So just having an opportunity to review it quickly, we have not had an opportunity to verify all the data in there, including loan repayment burden.

Now the significant feature——

Senator CHILES. Before you go any further than that. My understanding is that they did meet with you to go over their methodology.

Mr. CARNES. That is correct.

Senator CHILES. And that you did not have any objections to their methodology.

Mr. CARNES. Well, they met with us to ask us about the programs. Their decision to exclude two programs from our proposals is in my opinion totally irresponsible. This is one of the most inaccurate reports I have ever seen in my life.

The fact is that the report says that under our proposals, Federal student aid would go down. That is completely untrue.

Senator CHILES. Now the PLUS is a loan for parents, is it not?

Mr. CARNES. There are two programs, both loans for parents and loans for students that are currently in the Higher Education Act. Our proposals would uncap the limits on those loans. There would be unlimited capital available. And those are our proposals.

This study says that our proposals result in reduced Federal aid. That is completely untrue. In my opinion that casts doubt on everything else that is in that report.

MARKET RATE LOANS

Senator CHILES. You are proposing market rate loans for those two programs, are you not?

Mr. CARNES. We are indeed proposing market rate loans that are guaranteed for the PLUS and SLS programs.

Senator CHILES. Market rate loans for those programs will make these curves even greater, will they not?

Mr. CARNES. That is not necessarily so.

Senator CHILES. Why is it not?

Mr. CARNES. Because there are provisions in the Higher Education Act that allow for loan consolidation, that can extend out the repayments of these other programs, as well as the Income-Contingent Loan Program, for longer periods so that the loan burden is reduced.

STUDENT DEBT BURDEN

Senator CHILES. Fine, fine. So what you are saying is, rather than these charts showing a cut off here, these programs will extend these loans out here into perpetuity for the student.

With the market rate loans that you are talking about, you are not going to be able to reduce that curve any other way than just extending it out. Now under the terms I just gave you, in effect, this social worker, this kid here is going to pay back that much more because it is going to take that much longer because his earnings are going to be less.

Yes; if you want to extend him out another 4 or 5 years, 10 years, you might lower that curve a little bit. How much more is he going to be paying back? A heck of a lot more, is he not?

Mr. CARNES. We are, in fact, proposing that he pay back more. That is, in fact, an essential part of our proposal, and the rationale for that is that education is the single best investment of a dollar that a person can make in the world today. The average person——

Senator CHILES. Let me ask you this. Just a minute. Now let me back off of you and get to the Secretary, because he is the person that we hold responsible.

If, and you said that in your statement, that this is the single best program that we have. Now I think that is the way it has been. I think it has been a program that has brought this country forward, but now you are talking about changing that program drastically and I do not know whether it is going to be anywhere near the single best program that we are going to have.

Secretary BENNETT. We think it is a responsible proposal, because of the prospect of how much that student who graduates from college will make. That average student will make $650,000 more than the student who does not go to college. The great burden ought to be on the individual who benefits from that education.

Senator CHILES. You know, I went to school on the GI bill, and that helped me and an awful lot of people that were coming along went to school then. Proportionately, that was a great program at the time.

Do you not think that in some ways that has benefited the country because I paid more money back in taxes—all of those other people that came out of World War II and Korea, have paid more in taxes, and we raised the standard of living for this country?

Secretary BENNETT. Sure. Mr. Chairman, everything good benefits the country. But I think when most individuals decide to go to college, I think they decide to go to college because they think primarily it will be a good thing for them. And it is still a very good thing for them and a good investment for them.

But if I could come back again, you know, we can disagree about the proportion of grants and loans and what kind of grant and loan program we should have. But again, we want to review the evidence coming out of this GAO report—to review these charts to see if those lines are correct.

UNIVERSITY SPONSORED STUDENT SUBSIDIES

But one thing that jumps right out at us is the thing that we have been saying all along, which is that a lot of institutions are not being as sensitive to the needs of their students as Federal programs are. And I still want to know why the University of Miami most heavily subsidizes its wealthiest students? Why is that the case?

I mean, you do the profile of the poor student who graduates with a lot of loans. Well, under our proposals or under the Congress' alternative proposals, that student is going to get aid based on need. That student's indebtedness after college could be greatly diminished if the university would respond the same way that the Federal Government is responding.

Why that heavy subsidy for the wealthiest students? This is the point we have been making across the country, as you said. There is an interesting series of articles—one big review of this whole issue—in the Chicago Tribune, which I would like to show you, that shows just how this practice works.

You raise the tuition, you put more pressure on the Federal Treasury, you subsidize—the institutions—many institutions end up subsidizing to the highest degree, not their poorest students, but their wealthiest students. This is right at odds with our proposals and it just does not make any sense.

RISING TUITION AND STUDENT AID

Senator CHILES. I do not think it makes any sense in what is a historically black college, Bethune Cookman, to say that you are going to change the amount of money—to $53,000—to be paid back. That is staring in the face of a kid whose family is making $10,000 to $15,000 a year.

Do you think they are going to go along with that? Or do you think they are going to say, well, I might as well join the statistics of those dropouts. Why should I try to participate in that? I am not going to be able to pay back $53,000 or $60,000 or some other high amount of money like that.

Do you not think we are putting that beyond their reach in spite of all these things we say about what a college education is worth?

Secretary BENNETT. I think what it might do, I am quite confident what it will do in some cases, is have the student think about figuring the cost, what the indebtedness would be, and do more comparison shopping and price shopping, in terms of different institutions. More of that I think will go on.

But more of that is going to go on anyway, Mr. Chairman, because under the current Federal student aid policies, we never catch up. I mean, we do not catch up to what many of the colleges do.

We kick in with student aid, ever-increasing student aid. They turn around and raise tuition at twice the level of inflation again. And there we go chasing it. Sooner or later we are going to have to deal with this problem.

FEDERAL AND NON-FEDERAL EDUCATION FUNDING

Senator WEICKER. Mr. Secretary, on page 2 of your statement you justify your $5.5 billion cut with the following statement.

The $5.5 billion reduction we propose in Federal spending for fiscal year 1988 will be more than offset by a projected $14 billion increase in spending for education from other sources.

Now programs that your Department seeks to cut or eliminate include special education, including early intervention, and I will get to that later, civil rights training and advisory services, refugee and immigrant education, library assistance to special populations, targeted vocational education programs, assistance to the Virgin Islands, drug abuse

education, and scholarships for minorities and women in underrepresented fields.

Now you have made a statement that you have a projected $14 billion increase in spending for education from other sources. What evidence do you have to give to this committee and to the American people that those education programs supported by the Federal Government to address specific national priorities are being replaced by these increases in non-Federal support?

Secretary BENNETT. Well, you mention a whole variety of different programs, Senator. The basic figure, the basic estimate of the $14 billion increase is our best guess based on what we read in terms of the increases at the State and local level for a range and variety of educational programs.

In terms of whether the increases or how those increases will affect the specific programs you have mentioned, we would have to get back to you with more detailed information.

Senator WEICKER. Well, of course this committee tries to deal with a certain degree of precision with the budget and with the appropriations process—and especially in difficult budgetary times. On something as vital as education, do you think it is fair to predicate your proposals upon a best guess?

Secretary BENNETT. Well, the best guess is not a blind guess, it is not in the dark. We have some pretty good idea of what State legislatures are doing.

Senator WEICKER. Well, if your guess is wrong, there is not much that can be done about it, so people are going to be out of luck.

EDUCATION FOR THE HANDICAPPED

Let us get to the business of handicapped for a minute. With regard to programs for the handicapped, the press release issued by your Department to accompany the budget in January, and reiterated in today's testimony, states, "Last year the Congress passed uncalled for increases in appropriations and imposed new requirements and created new authorities that needlessly burden the States with new Federal requirements."

Also in today's testimony you say that programs for the handicapped are an essential Federal responsibility that ought to have a high claim on available funds, even when other programs must be reduced. Now I would like to have you explain that statement, especially as that relates to uncalled for increases in appropriations and the imposition of new requirements.

Secretary BENNETT. Sure. The increases that we are talking about, we think, in light of budget realities, were too large, as you know. We have said that before.

And we think that in some of the programs, there are new requirements that we do not think the States are ready for, such as the supported employment provision. We do not think that many of the States are ready to handle the supported employment requirements.

The Infants and Toddlers Program, which we know you have great interest in, is another example. We think again that good efforts at HHS and the fact that some of our funds in other programs can be used in this area suggest that in these fiscal times, this new program was not warranted.

EARLY INTERVENTION PROGRAMS

Senator WEICKER. Ail right. Then let us find out exactly how the States reacted to the Early Intervention Program, for which you people are calling for zero funding.

By the end of last month 40 States had already indicated they definitely would participate in the first year of the new Early Intervention Program for Handicapped Infants and Toddlers. Such a response quite clearly reaffirms the direction taken by Congress last year in adding this new program to the Education of the Handicapped Act.

So I would like to know how it is that both Congress and the rest of the country recognize the need for the program, yet you recommend absolutely no funding to implement it in your budget?

Mr. CARNES. Mr. Chairman, we have said this before, and in the colloquy with you once before we had an exchange on this point.

We do support early intervention. We are in favor of it. We have written reports to Congress saying that we do support early intervention. And we have been strong supporters of preschool incentive grants. In that particular program, we are proposing what we would regard as significant increases, almost triple the fiscal year 1986 level by fiscal year 1988.

With respect to infants and toddlers, our view on that is that we agree that support for these individuals has been proven to be successful.

However, we do not think that this is the appropriate way to achieve that goal. We had various disagreements with the particular program as laid out including the lack of targeting of services, given the overall size of the funding. In addition, there is the question of overlap and duplication with HHS, where, according to our best estimates, in the neighborhood of $2,559,000 are already provided for services to these particular children.

We do not oppose services for these individuals. We are questioning this form of the services.

Senator WEICKER. Well, I would suggest to you that it comes rather late in the game. The President of the United States, your boss, signed this bill into law just a few months ago. Signed it into law. I assume that if he disagreed with it he would have vetoed it.

If he signed it into law, why is it that we now have before us a proposal that you zero fund that which the President signed into law?

Mr. CARNES. If I might, Senator. The President, of course, looks at the entire bill and does not veto bills necessarily because of one particular provision with which he might have a disagreement. He looks at what the overall bill provides and weighs its virtues against its——

Senator WEICKER. We are well aware of the very intense negotiations that went on between the executive branch and the Congress for Public Law 94–142 and its amendments. Indeed I was a part of those negotiations and the issue of early intervention was the main issue. Both sides gave a little. There was give and take there.

Now the administration has zero funded the program, right after it has been passed into law. It is clear to me that regardless of what you say, early intervention, under Public Law 94–142, is not a priority of this administration and gives way to other matters.

SUPPORTED EMPLOYMENT PROGRAMS

Now Mr. Secretary, you made the statement a few minutes ago, or Mr. Carnes made the statement on supported employment, that the States were not ready. I have a letter before me from the Council of State Administrators of Vocational Rehabilitation, signed by their president.

State rehabilitation agencies stand ready to implement a supported employment program of which we can all be proud. They are 100 percent behind the program. Why are you up here saying that they are not ready for it?

Secretary BENNETT. Well, we think that is not clear to us. I have spoken to Mrs. Will about this a couple of times. I visited a couple of sites in one State where it was clear to me from talking to the people involved that a great deal of planning and a great deal of preparation has to go into place before these things can work and work effectively.

Certainly the intent of the bill, the intent of the legislation, is sound enough. But despite the fact that States may say they are ready to take the money, we are not confident that the necessary preparations are complete, that the kinds of things that need to be done for this type of program to work successfully have been done. We understand their interest in getting the funds.

Mr. CARNES. May I elaborate on that for a second, Senator? In the case of supported employment, we do think that is an important program. We supported a number of supported employment projects ourselves in our special demonstration programs and, as the Secretary said, we have visited them and we are very impressed by them.

We will be getting the funds out in this program. We have received your letter and the funds will be out this fiscal year. Supported employment, from our point of view, is very important.

And what we want to ensure is that the individuals who receive the services under this program have meaningful supported employment, that they do not get training that is makework or essentially babysitting, but that they get meaningful employment. We have seen meaningful employment that can work very well. In our opinion, the States need some guidance on exactly what kinds of services need to be provided there.

And just one further point if I could. We think that even when these people have completed their training, they are still going to need serv-

ices. The important thing is to be sure that there is a funding stream available and in place for them when the supported employment training has been completed.

Senator WEICKER. Now first of all let me say this. You know as well as I do that the entire concept behind supported employment is to take the most severely disabled and train them in just exactly those things that are opposite to babysitting. That is the whole purpose of supported employment. So when you are saying we do not want them trained in babysitting and menial tasks, that is exactly what the program itself seeks to avoid or do away with.

OBLIGATION OF SUPPORTED EMPLOYMENT FUNDS

Now I will tell you what has happened, you have spent all your time since this went into law, you have spent all your time planning the rescission of these funds, instead of planning for the actual supported employment.

Mr. CARNES. When we proposed the rescission we did not——

Senator WEICKER. Your rescission was rejected by the Congress. And when was it that we passed the supported employment? Again, less than 1 year ago. October.

And instead of getting to the business of implementing the law, you go ahead and plan on a rescission. And then the rescission is rejected, and now you are telling me, now we are starting to get to work on implementing the law.

Secretary BENNETT. No; we have been at work at that. We will get the money out. The money will be out by September.

Mr. CARNES. We have been working on preparing regulations, notwithstanding the fact that we proposed rescissions.

FEDERAL SUPPORT OF PROGRAMS FOR HANDICAPPED

Senator WEICKER. Your budget before us, and that which you proposed in terms of rescissions, is a travesty as it applies to the handicapped, the disabled, the retarded, the less fortunate of this Nation. Senator Chiles has already in his statement, vis-a-vis student loans, pointed out the impact on those of lower income. I am pointing out the impact of your budget on those that are of lesser capabilities, if you will, in their physical or their mental abilities.

And the only opportunity they have is that which is going to be given to them by these targeted programs of the Federal Government. And Mr. Secretary, these targeted programs came to pass because, no, the private sector would not take it on. And the local communities would not take it on. And the State governments would not take it on.

And if the Federal Government leaves the field, then opportunity is lost to these very special Americans who deserve our care. And the budget totally belies it. It is not a matter of philosophy. In dollar and cents, it belies the rhetoric.

Secretary BENNETT. I really disagree with that, Senator. We have never said that the private sector can do all of this.

Senator WEICKER. You are saying $14 billion, which you admit is a blind guess, a blind guess, $14 billion is going to go ahead and supplement this Federal effort.

Secretary BENNETT. No, no; the point is our budget, admittedly, our budget is a reduction over your recommendations in fiscal year 1987 and what was finally appropriated. But it is an increase over fiscal year 1986. It is a substantial budget. Given the reductions elsewhere in the Department, this program I think represents a clear commitment on our part to be serious about these issues.

We agree with you about Public Law 94-142. We work hard on these issues and we think this is a substantial figure.

Senator CHILES. Senator Harkin?

Senator HARKIN. Thank you very much, Mr. Chairman.

EARLY INTERVENTION PROGRAMS FOR HANDICAPPED

Mr. Secretary, I was listening to the exchange between you and Senator Weicker. Let me read you a letter that was sent to Mr. Gallaway, Mr. James Gallaway, executive director of the National Association of State Directors of Special Education, dated October 16, 1986.

It says:

> I am pleased to inform you that the President signed S. 2294 on October 8, 1986. The bill which will extend several existing programs under the act also provides a variety of new programs for handicapped children. The Reagan administration is committed to educational services for handicapped children, including special services to handicapped infants and preschool children. Providing services to these children before they reach school age can result in greater educational achievement and can reduce their dependence on others as they grow older. These children are especially deserving of our assistance so that they may reach their fullest potential.

That letter was signed by Frances Norris, assistant secretary. Do you know Frances Norris?

Secretary BENNETT. Yes, sir.

Senator HARKIN. Was that letter right, or are you right now? What is the correct interpretation?

Secretary BENNETT. That is correct.

Senator HARKIN. That is correct?

Secretary BENNETT. Yes.

Senator HARKIN. Well, I thought I just heard in your exchange with Senator Weicker that you did not feel like you needed to spend that money now for this program, early intervention.

Secretary BENNETT. No; we feel we need to spend money. We disagree on some programs and whether we need to expend the amounts that have been recommended in fiscal year 1987. But we certainly agree on the general direction. We tripled——

Senator CHILES. The difference is if it is a program that they thought up, it is all right. If it is one that the Congress thought up or we proposed, they do not agree with that.

Secretary BENNETT. That is one version of it. That is not the version I would take. We believe in preschool efforts, preschool incentives. That is why we tripled the program over the fiscal year 1986 level.

But this is what happens. We proposed, using fiscal year 1986 as the benchmark, a tripling of the preschool program. Congress proposes quintupling it. And then the argument is made that we are not interested in supporting the program.

Well, under our restraints, we probably cannot match the dollars you are willing to spend. But to conclude from that that we are not interested in these programs is not fair and not true.

PROGRAMS FOR HANDICAPPED INFANTS AND TODDLERS

Senator HARKIN. You have no money for early intervention before age 3.

Secretary BENNETT. Oh, you mean infants and toddlers.

Senator HARKIN. Yes.

Secretary BENNETT. Well, again, in the Infants and Toddlers Program, there are several considerations here. One, funds provided by maternal and child care at HHS and funds from our Early Childhood Education Program can be used for infants and toddlers.

Senator HARKIN. Can be. Are they being used?

Secretary BENNETT. Yes; they are.

Mr. CARNES. In addition, $2.6 billion from HHS is used for support of these children.

Senator HARKIN. What is the money being used for?

Mr. CARNES. It is being used for services for children zero to two.

Senator HARKIN. Comprehensive services?

Mr. CARNES. I cannot comment on the degree of comprehensiveness on those services. There is a range of services being provided.

Senator HARKIN. Can it be used for what we provided the money for under Public Law 99–457?

Mr. CARNES. What that law provided money for was planning and coordination. It did not provide for substantial services. It provided for process and mechanisms.

Senator WEICKER. Will the Senator yield?

Senator HARKIN. Sure.

Senator WEICKER. The $2 billion you are talking about, HHS, are we talking about Medicaid, for health services?

Mr. CARNES. That is correct.

Senator WEICKER. Not education; so keep going at him. This is the type of legerdemain which——

Mr. CARNES. Let us keep it going.

Senator HARKIN. I think those $2 billion were for health, not for education. So maybe we have to dismiss this letter by Frances Norris, maybe you are not committed to educational services.

Mr. CARNES. We have already explained this, Senator Harkin, and we are committed to services for these children.

Senator HARKIN. I thought you explained it until I heard Senator Weicker really explain it.

Mr. CARNES. What we have said is that we do not think this program is the proper mechanism or the best mechanism for providing services to children zero to two.

Senator HARKIN. This is not, but you say Health and Human Services is; but you are not doing it through Health and Human Services, either.

EARLY INTERVENTION—EDUCATIONAL VS. MEDICAL

Mr. CARNES. We are talking about services to children zero to two. There is a substantial body of thought that argues that those services are primarily medical in nature.

Senator HARKIN. A substantial body of thought says that they are primarily medical but not educational, right?

Mr. CARNES. Yes, sir; but on the other hand, we are still not rejecting the idea that educational services can be provided.

Senator HARKIN. You are saying that these kids ought to have health attention but they do not need any education?

Secretary BENNETT. That is not what we are saying. We will certainly give you authorities that talk about the needs of these children zero to two, and you will find, I think, in the literature that it is very hard in many circumstances to distinguish health needs from educational needs for children zero to two. A lot of these needs are the same. They result in the same activity.

Senator HARKIN. I am certain, Mr. Secretary, that Senator Weicker, when he chaired the Subcommittee on the Handicapped and developed this legislation, heard all kinds of testimony from different groups of people and expert witnesses. They developed the legislation, and the intent of Congress was very clear.

Now, toddlers and infants need educational services also, and this letter from Frances Norris seems to speak to that. Now you are telling me that you just unilaterally decided that that is not necessary, even though we said it was necessary.

Senator WEICKER. More importantly, if the Senator will yield, in this area education is the medical prescription. It is education that is the medical answer for these children. This is where they merge, one of the rare instances where they merge. You are citing health figures, and Senator Harkin is citing education figures.

Senator CHILES. It is also, I think, the feeling of the Congress, and I was surprised that it is not the feeling of the administration, that the dollars we spend in this early intervention, again, are the dollars that you get that return pressed down, running over 10 times, 100 times return, because you are giving this handicapped child the ability to maybe not be a ward of the State, maybe not be incarcerated, maybe not be institutionalized at some later date if we are able to intervene at this time.

Secretary BENNETT. We agree with that, Mr. Chairman.

Senator CHILES. It is not a bleeding heart kind of thing we are talking about.

Secretary BENNETT. I quite agree. This is a good investment. There is general agreement that this is a good investment—for proper care of these children from zero to two.

With that question aside, there then comes the question of how do you do it, how do you administer it, what is the most effective way, how many programs do we have, what populations do they reach, do they overlap. I think reasonable people can disagree about those questions.

Senator CHILES. When I have a hearing and talk about infant mortality and meet with some mothers in Tampa and they tell me, I can institutionalize my child and it costs $60,000 plus a year but, I cannot get some help trying to keep my child at home so that I can get a little educational help and a little health care help or anything else that would cost $300 a month, I cannot get that. Now, that is a dumb policy on our part. We are going to force that mother to institutionalize that child and not be able to provide the help, the early intervention. That is just pretty dumb.

Senator HARKIN. Thank you, Mr. Chairman. I got off on that tangent. I do have one other question.

Senator CHILES. Go ahead.

REHABILITATION SERVICES ADMINISTRATION—EDUCATION RESPONSE TO CONGRESSIONAL REQUEST

Senator HARKIN. Mr. Secretary, last December 16, Senator Weicker and several other Members of the Senate and the House wrote you a letter regarding the Rehabilitation Act Amendments of 1986 and specifically the Rehabilitation Services Administration. It is a list of questions, and this is your response which was delivered last night at 6 p.m. in response to a letter that was sent on December 16 regarding the Rehabilitation Services Administration.

In that letter of December 16 that was sent to you by Senator Weicker and several others, they pointed out the pertinent provision of the amendment that said that the Secretary shall take such action as necessary to insure that the staffing of RSA, Rehabilitation Services Administration, shall be in sufficient numbers to meet program needs and at levels which will attract and maintain the most qualified person; and two, such staff includes individuals who have training and experience in the provision of rehabilitation services and that staff competence meet professional standards.

RSA BUDGET REQUEST

Mr. Secretary, I believe the cumulative effect of the decision made by you with respect to the rehabilitation program raises very serious questions about the Department's commitment to rehabilitate persons with disabilities consistent with congressional intent.

You state in your fiscal year 1988 budget justification that 1987 appropriations for the rehabilitation program were unjustified and unwarranted. There are proposed rescissions of $127 million. Your 1988 budget request is $84 million less than the 1987 appropriations. This is happening at the same time there are significant waiting lists of persons with disabilities who want to receive training and enter into competitive employment.

STAFFING OF RSA

In addition, there are major management and administrative problems confronting the RSA. I have been told by many people, including my own staff, that the central office of the Rehabilitation Services Administration is like a ghost town. You call, the phones ring and ring, and sometimes no one answers. When finally someone does answer, they say we will get back to you. Maybe the phone call is never returned, and I have documentation on that if you would like to have it.

There has been a downgrading of 25 of the 76 central office staff as a result of an audit. Significant numbers of experienced and qualified persons have left the RSA out of frustration.

I understand there is some recruitment underway, but that only a few positions have actually been filled. Well, it is just one story after another with the Rehabilitation Services Administration.

I just want to ask you this, Mr. Secretary, without going on any longer, and I could for several minutes, is it your intent to dismantle the Rehabilitation Services Administration as a functioning partner in our effort to address the rehabilitation needs of persons with disabilities?

Secretary BENNETT. No, absolutely not; of course not.

Senator HARKIN. You are not trying to dismantle it?

Secretary BENNETT. No; not in the least. We are trying to strengthen it.

Senator HARKIN. Well, I would like to know what your plans are for the Rehabilitation Services Administration. I want to know how and in what timeframe you plan to implement them. What are the changes? How do you propose to strengthen it? What is your timeframe?

Secretary BENNETT. Let me just comment. I would like, Senator, the documentation that you have about the phones not being answered and inquiries not being responded to. We are indeed trying to do what we can to strengthen that area of our work.

STAFFING OF RSA

As you know, every year we have had a decrease in our ceiling of employees at the Department. We have raised the ceiling in RSA and have been seeking to fill new positions. In fact, since January OSERS has hired 20 persons and announced an additional 59 positions. Of these, 23 are in RSA. We have given that employment effort the highest priority. We have directed the head of our Office of Personnel to give that highest priority.

As to some of the other concerns, maybe Mr. Carnes can comment, but we are certainly trying to strengthen the personnel effort.

My general counsel reminds me that you would not appoint a man of Justin Dart's reputation and ability if you meant to downgrade an office. We think everybody applauded that appointment. I guess you should ask Justin Dart whether he thinks we take his work seriously, whether he thinks we have been paying attention.

Senator HARKIN. So you feel you are giving him the support he needs?

Secretary BENNETT. Yes, sir; I will admit that it has taken some time to fill these positions, but we are filling those positions. Again, Mr. Dart, I think, would be happy to tell you his view, his sense of our priority in his area.

Senator HARKIN. Thank you.

EDUCATION RESPONSE TO CONGRESSIONAL REQUEST ON RSA

Senator WEICKER. I just might add, Mr. Chairman, to extrapolate, you said you wanted identification of the matter with the phones. Well, I, if I can extrapolate the writing experience, the letter experience, I think that answered the question of the phones. Senator Harkin and I and others sent the letter on December 16, and we got a response on April 21. If I extrapolate that to the telephones, somebody would be sitting there with a phone to their ear for a very long time.

Secretary BENNETT. Let me just say that is cute. This letter, as I recall, was not a yes or no kind of proposition. You asked some fairly detailed questions, and it took us some time to answer those, Senator.

Mr. CARNES. Senator Harkin held up the huge volume of material that it took to answer those questions, and part of those answers were contingent upon our assessment of what requirements the new amendments were going to impose in terms of staffing needs and so forth. So this was not a simple letter to respond to. It was a difficult letter. It required a lot of analysis.

Secretary BENNETT. We are doing a lot of analysis. You know, we have had three times as many regulations to get out in this Department this year than we have had in any other year. The notion that the place is not running, that it is not managed, that it is not meeting its responsibilities is just crazy.

Senator CHILES. Senator Specter.

Senator SPECTER. Thank you very much, Mr. Chairman.

DRUG-FREE SCHOOLS—OBLIGATION OF FUNDS

Secretary Bennett, I would like to begin with the activities of your Department on drug education. Last year, as you know, with much bally hoo the Congress enacted legislation that put up $1.7 billion for a variety of programs relating to drugs. As I understand it, the breakdown for State and local grants on an educational level was $159 million. The most recent figures that I have show that only $19 million has been disbursed by the Department of Education.

My question is, is that an accurate figure and, if so, why the slowness in distributing these funds for drug education?

Mr. CARNES. Senator Specter, the amount available is $161 million. As of April 21, $55 million had been obligated. Twenty-five States have already received their awards. Seventeen States were fully awarded. Eight are SEA awards only.

We have received 57 applications. We expect to obligate the remainder of the money by early summer. We think that, in fact, the performance of the Department on the obligation of funds for the States has been exceptional. We got this money out. We got guidance out to the States in record time. This bill was enacted last fall. We had the State directors in, in January, and we have gotten their applications and the awards have been negotiated, and most of them are out.

Senator SPECTER. When you say that funds are obligated, does that mean that money is in hand to the State agencies?

Mr. CARNES. The money is available to the States to draw down. We have entered it on the books as an expenditure of the Department. It goes from our Department over to the Treasury Department, which issues the check or the letter of credit, but that is usually 3 or 4 days.

Senator SPECTER. How much——

Senator CHILES. That is 28 percent of the money that has been obligated.

Mr. CARNES. I cannot help it, Mr. Chairman, if the States have not yet all sent in their applications. This is a brand new effort. In fact, it is an entirely new effort. The performance of getting this money out within 6 months of when the money was appropriated and a brand new law enacted, I think, is a remarkable one.

Senator SPECTER. Well, what do you say about the fact that you have not obligated any of your discretionary funds, over which you have complete control? That 28 percent includes that money.

Mr. CARNES. In 2 weeks we will have a public service announcement which will be shown on television, and we are developing regulations for grant awards to organizations to work on producing audio-visual materials.

Senator SPECTER. Mr. Carnes, I am interested in the facts here, and I do not have them yet, so let me pursue them.

I do not want to foreclose you from your own compliments about how you consider it to be remarkable, but let me get to the facts here. You say $161 million was appropriated?

Mr. CARNES. Yes, sir.

Senator SPECTER. Now, how much of that is in hand in State and local governments, if you know?

Mr. CARNES. Fifty-five million dollars has left the Department. Some of that money could be still at Treasury, but the awards so far have been made by the Department of $55 million.

Senator SPECTER. All right. The answer is you do not know precisely how much of that has gotten to State and local governments as of this date?

Mr. CARNES. That is correct. Furthermore, the practice often is that when States draw down the money they would not necessarily draw it all down in one lump sum. They might draw it down in installments anyway. The money is available for them now, though.

DRUG-FREE SCHOOLS—PROGRAM GUIDANCE ISSUED

Senator SPECTER. I have heard some complaints that the applications were not ready for some protracted period of time. Is there any substance to that?

Mr. CARNES. I can check on that for you, Senator Specter, but there were no applications or guidelines at all last fall, as you know. This was brand new, just getting off the ground.

Senator SPECTER. Well, how long did it take the Department of Education to promulgate the rules and put the applications out?

Mr. CARNES. We did not promulgate rules on this, sir. What we did was to award funds under the statute because the effort to promulgate rules would have delayed the award of funds by 1 year. What we wanted to do was to see all these funds out this spring so that they could be in place when school began in the fall.

So what we did was, in the absence of a promulgation of rules, we issued guidance, we brought in State directors for conferences and explained to them how to run the program.

DRUG-FREE SCHOOLS—FUNDS AVAILABILITY

Senator SPECTER. Mr. Carnes, are you saying that none of these funds will be available for actual expenditure in the schools until the fall of 1987?

Mr. CARNES. No, sir; they are available for expenditure now. What we wanted to do was to get the money out now so that, in fact, the programs that the States are going to run will actually be up and running in the schools by the fall.

Senator SPECTER. When were the first funds available for the first school district which applied?

Mr. CARNES. I do not know the answer to that, sir.

Senator SPECTER. Well, I would appreciate your providing that.

[The information follows:]

AVAILABILITY OF FUNDS AT LOCAL LEVEL

The Department began making grants to the States for the Drug-Free Schools and Communities Program on March 6, 1987. When these funds reach the local level depends on whether the local educational agencies [LEA's] submit approvable applications to their State educational agencies [SEA's] and how quickly the SEA's review and approve those applications. We expect the first LEA grants to be made on May 15, 1987, and the remaining LEA grants to be made by early July 1987, so that programs may be up and running at the beginning of the school year.

AVAILABILITY OF DRUG-FREE SCHOOLS FUNDS

Senator SPECTER. I appreciate the fact that it is not easy to set up a new program, but where you have $161 million appropriated by the Congress in an emergency program in October, and here we are on April 22, I am not sure that the allocation of $55 million is really enough.

Senator CHILES. Mr. Carnes, are you not spending at a rate as if you just had $100 million rather than the $200 million?

Mr. CARNES. Absolutely not, Senator; absolutely not.

Senator CHILES. It is amazing that the numbers seem to work out that way.

Mr. WILLKIE. The awards, Senator, are contingent upon receipt of an eligible application by the State. If I must say, this entire line of questioning is really extraordinary in light of the response that we have had from the States. They have appreciated the record speed at which the Department has moved in getting this program into place.

Initially, we were criticized for moving too fast on this program.

Senator SPECTER. Who criticized you for moving too fast?

Mr. WILLKIE. Congressman Rangel said, gee, Secretary Bennett wants to move money out the door without issuing regulations on this. We suspended the regulatory process in order to expedite the process of making these awards.

Senator SPECTER. I am visiting school districts in Pennsylvania which have not seen any of the funds. Earlier this week I was in Westmoreland County, and they have drug programs with no funds. Two weeks ago I was in Allegheny County, and they have drug programs and no funds.

Mr. WILLKIE. Do you know when Pennsylvania submitted its application?

Senator SPECTER. When did Pennsylvania submit its application?

Secretary BENNETT. We do not know. We are asking you. Do they have some reason to think that we have been delaying?

Senator SPECTER. Mr. Secretary, do not ask me. That is a question for me to ask you.

Secretary BENNETT. OK, we will check. We will tell you when we got the application from Pennsylvania if we got the application from Pennsylvania. Again, I think you will see that our response to getting the drug money out has been—I will say the same thing Mr. Willkie said—that most of the criticisms we have had is we are trying to get the money out the door too fast.

Senator SPECTER. Who criticized you for that?

Secretary BENNETT. Again, Mr. Rangel and others.

Senator SPECTER. What others?

Secretary BENNETT. Some other members of the committee. I do not recall, but he was joined by a couple of other members of the committee on that.

We will check the status of the Pennyslvania application and get back to you on that today.

DRUG-FREE SCHOOLS—AVAILABILITY OF FUNDS

Senator SPECTER. I am still trying to get the facts. I am still trying to get to the fact as to how much money is in hand; $161 million, of which $51 million has been allocated, but as yet what the word "allocated" means has not really been ascertained.

Mr. CARNES. As I said, we have given the States $55 million. It is available for them now to draw down from the Treasury Department.

Whether they have actually drawn the full amount, I do not know. I could call each of the States and ask them if they have actually drawn it all down or how much of their allotment they have drawn down.

As I said before, they do not all draw down all of the allotment at the same time. They may draw it down in portions.

DRUG-FREE SCHOOLS—STATE APPLICATION FOR FUNDS

Senator SPECTER. In a situation where the State does not take the initiative for utilizing the Federal funds, does your Department give the State a nudge and say this money is available? We have a declared national policy to fight drugs, and you ought to be making use of this money.

Mr. CARNES. Yes, sir, of course. I remind you this is money available for 2 years. In fact, when the law was enacted Congress recognized it would be very difficult to get this money out in 1 year. We are going to get it out in less than 1 year, but it is 2-year money, and it will be out. If the States are not drawing down their money, we will be aware of it, and we will take action about it.

Senator SPECTER. What action have you taken to date?

Mr. CARNES. We have not taken any action on that issue yet because, as a matter of fact, we are not aware of any State that has not yet drawn down the funds that are available to it.

Senator SPECTER. That have submitted an application.

Mr. CARNES. Two-thirds of the States have applied for the funds, one-third has not.

Senator SPECTER. What procedures are in place in the Department of Education to prod the States which have not applied for the funds?

Mr. WILLKIE. We had a conference in January, Senator, in the middle of the snowstorms. We brought in representatives from all the States for 2 days and explained to them in some detail how this program works, explained to them our expedited procedures for making these awards as soon as possible.

The burden does rest on the States to submit eligible applications and meet the requirements that Federal law imposes to insure that funds are appropriately expended at the State and local level.

DRUG-FREE SCHOOLS—OBLIGATION OF FUNDS

Mr. CARNES. Our expectation is that the remaining funds will be obligated by June.

Senator SPECTER. June of this year?

Mr. CARNES. Yes, sir.

Senator SPECTER. The full $161 million?

Mr. CARNES. Yes, sir.

PUSHING STATES TO APPLY FOR DRUG EDUCATION FUNDS

Senator SPECTER. Well, my own sense is that there is a dire emergency situation in the country. I am sure you will agree with that.

Mr. CARNES. Yes; we do.

Senator SPECTER. It seems to me that the push has to come from the Department of Education to implement what the Congress has said.

What I am really trying to find out is what the facts are. I am not drawing any conclusions there. There seems to me to be a remarkable amount of electricity between your table and their bench, and so far as this Senator is concerned all I want to do is find out what the facts are.

I do not think it is particularly helpful to have the compliments coming from your side about your performance. You may be entitled. What I am looking for is how many dollars are in hand? Who has gotten what money? I want to find out what use they made of the money.

If the States are dilatory, then we have to push the States. Part of that responsibility lies with the Department of Education if the States are not pursuing their applications and getting their money. I travel my State. I see the problem. I see the money is not in hand, and I am trying to get the answer.

Secretary BENNETT. Again, my own involvement in this is two things. Once the legislation was passed, I directed my staff to get this money out as quickly as possible consistent with what I took to be the intent of Congress.

Second, when the State representatives came in January, I met with them. I started this session and said we have legislation. People are here to help you in the preparation of your application. Get your application in. I want to get the money out. Several of them commented, even joked, are you trying to set some kind of record in terms of getting the money out. We may not be able to get our applications in as fast as you guys are ready to get out the checks.

So again, this is why there is a little bit of bewilderment.

Senator SPECTER. Who said that?

Secretary BENNETT. Several people at the conference, as I was walking out.

We will give you a full report on this and particularly find out about Pennsylvania and let you know this afternoon or tomorrow.

DRUG-FREE SCHOOLS—BUDGET REQUEST

Senator SPECTER. Mr. Secretary, on your proposed budget for fiscal year 1988, as I understand it, the drug-free school funds would be cut by 50 percent to $100 million?

Secretary BENNETT. We would go back to our request of 1 year ago for $100 million, yes, sir.

Senator SPECTER. Why? What sense does it make to cut the funds for drug education in the Drug-Free Schools Program when the Congress has made a declaration of national policy, as we did last year, to appropriate $1.7 billion?

Secretary BENNETT. Well, the declaration of policy, I take it, represented by the entire package, is that we need to do something about drugs, to get a hold of this drug problem. We have been paying attention to this issue for the last 2 years, and it is our sense, given current

circumstances and what we know about getting drugs out of schools, that $100 million will be adequate.

Senator SPECTER. Why do you think that $100 million will be adequate?

Secretary BENNETT. Based on what we know is effective in the schools. We did a breakdown. I do not have it on top of my head. We can get it to you. We did a breakdown of schools in this country which are most effective in dealing with drugs.

PENNSYLVANIA APPLICATION FOR DRUG EDUCATION FUNDS

The Pennsylvania application is not in, Senator Specter. They have to get their application in before they get the money.

Let us go back to drugs.

PUSHING STATES TO APPLY FOR DRUG EDUCATION FUNDS

Senator SPECTER. What are your practices on pushing a State like Pennsylvania if its application is not in?

Secretary BENNETT. Well, they are big boys and girls. If they want the money, they ought to be able to get their application in. They know we have the money. We are happy to have them apply, but if they do not want to apply or they are running on a different schedule, what do you want us to do?

You could probably get them to get an application in real fast, I would imagine. If you want me to call somebody——

Senator SPECTER. I am not working only on you on this subject, Mr. Secretary.

Secretary BENNETT. Back to drugs.

Senator SPECTER. What I am trying to ascertain is the policy you have, if the States do not apply, for pushing the States. I have already gotten the answer that you are pushing the States. I am glad to hear that, because I think you should.

The question is what have you done with Pennsylvania or other States? I represent Pennsylvania, but I am concerned about the other States as well.

FEDERAL ANNOUNCEMENT OF FUNDS AVAILABILITY

Secretary BENNETT. We made an announcement. We sent letters to all of the Governors and chief State school officers. We called a meeting of their representatives from all the States. We said here is the cash or there is going to be cash soon. If you want it, come and get it. I do not think we should drag them kicking and screaming.

Senator SPECTER. Mr. Secretary, my suggestion to you——

Secretary BENNETT. They know we have the money.

Senator SPECTER. My suggestion to you, Mr. Secretary, is that you press the States when they do not move. I know they are big boys, but the Federal Government has declared a policy. You are the Secretary of Education. The Congress has appropriated money, and we would like to look to you to get it done.

I will be working on Pennsylvania as well, but there may be a great many other States which may need a little prodding.

Secretary BENNETT. My guess is after this colloquy they will have gotten the message.

Senator SPECTER. They have gotten the message before today, but they may get the message again.

IMPACT ON PENNSYLVANIA OF DRUG EDUCATION CUTS

Mr. Secretary, my time has expired. What I would like to do is ask unanimous consent that a series of documents be included in the record, and I want to make available to you, Mr. Secretary, some letters which I have received from school districts in Pennsylvania in anticipation of your testimony today.

On March 20 I wrote to the school districts in the State about the impact of the cuts on their programs, and I have received responses which portray an extraordinarily serious situation of impact on school districts in my State if the budget cuts were carried out as you have proposed them.

Now, I would ask you to do two things. I would ask you to review them, have staff review them, and let me have as much of a response as you can, which I will transmit to these districts to see how we are going to work out the problems.

These are a letter from the Philadelphia School District dated March 27; Pittsburgh public schools dated April 2; the Clairton public schools dated March 26; the Frazier School District dated March 27; the Montours Area School District dated April 1; the Williamsport Area School District dated April 1; the Penn-Cambridge School District dated March 31; the Quakertown School District dated March 27; the Ridley School District dated April 2; Boyertown, April 1; Seneca Highlands, April 1; Waynesboro Area District dated March 31.

DRUG EDUCATION CUTS—IMPACT ON PENNSYLVANIA

I think if you take a look at what impact is felt in this representative area, you will see the serious concerns that I have about the budget cuts.

[The information follows:]

LETTER FROM THOMAS C. ROSICA, EXECUTIVE DIRECTOR, CATEGORICAL PROGRAMS, SCHOOL DISTRICT OF PHILADELPHIA

March 27, 1987

Miss Eartha Isaac
c/o Senator Arlen Specter
Room 331
Hart Senate Office Building
Washington, DC 20510

Dear Ms. Isaac:

Dr. Clayton has asked me to respond to your letter of March 20, 1987. The attached material which was submitted to your Philadelphia office on February 3, 1987 responds to the areas listed in your letter.

The one area not responded to is a voucher program proposed for Chapter 1. We feel this program is inadequate as designed and will not provide an effective program of compensatory education for nonpublic school students. Another of our concerns is that organizations involved in the voucher effort will not be held to the same stringent civil rights requirements and handicapped requirements that school districts are mandated to meet.

Should you require any additional information, please feel free to contact me.

Sincerely,

Thomas C. Rosica

Thomas C. Rosica

LETTER FROM MARION B.W. HOLMES, EXECUTIVE DIRECTOR, DIVISION OF CAREER AND VOCATIONAL EDUCATION, SCHOOL DISTRICT OF PHILADELPHIA

April 9, 1987

The Honorable Arlen Specter
United States Senate
331 Heart Building
Washington, D.C. 20510

Attention: Mrs. Janice McKnight Magona,
Legislative Correspondent

Dear Senator Spector:

It certainly was a pleasure to have met and talked with Mrs. McKnight last month when two of my colleagues from the State of Pennsylvania and I met with her. We appreciated the time she arranged for us to meet with her.

As promised, enclosed is a copy of results of an informal survey that I conducted of 45 Large City Directors of Vocational Education Programs to determine to what extent states were providing matching funds for Title II, Part A, Sec. 201, Disadvantaged and Handicapped Set-asides (P.L. 98-524, Carl Perkins Vocational Education Act of 1984), as required by the Act, Title V, Part A, Federal Administrative Provisions, Sec. 502(b).

As you can see, matching or providing the non-federal share of the Disadvantaged and Handicapped Entitlements of the Act has fallen almost exclusively on the shoulders of the local school district. All too frequently, local education agencies' fiscal status (especially urban and rural areas) makes it impossible for them to supply the required local matching funds. Thus, a major portion of the Perkins Act Disadvantaged and Handicapped Entitlement Funds go unused and the targeted population goes underserved.

During reauthorization of the Act in 1988, we seek your support for assuring the reauthorization. Additionally, we ask that the following be considered in rewriting of the Act:

a. provide for flexibility at the local level with accountability built in

b. eliminate the matching requirement of excess cost for the disadvantaged and handicapped

c. restore "maintenance" as well as "developmental and expanding" options for use of the money

d. emphasize personnel retraining/training support for updating vocational educators' technological skills.

Also enclosed is a statement showing the actual amount of money the School District of Philadelphia was entitled to for the Disadvantaged and Handicapped Set-asides and the actual amount the District was able to match. The State provided none of the matching monies. The chart also shows the total number of students (special populations) served with these funds and the total population to be served.

I welcome the opportunity to discuss the issues identified in this letter or any others. Please call upon me if I can be of further service.

Sincerely yours,

Marion B.W. Holmes

(Dr.) Marion B.W. Holmes
Executive Director
Career and Vocational Education

OFFICE OF CATEGORICAL PRO
SCHOOL DISTRICT OF PHILAD
FEDERAL FUNDS 1980 - 1

	1980-81	1981-82	1982-83
EESA Math/Science	$ —	$ —	$ —
Chapter 1	35,699,669	33,687,491	32,425,853
Public Law 89-313	768,800	925,400	1,317,200
State Administration	—	—	68,218
Chapter 2	9,198,555	6,573,959	4,087,137
Impact Aid	4,900,000	930,255	349,200
Vocational Education	5,614,268	6,933,000	5,637,258
Adult Education	982,745	842,313	695,618
Handicapped Education	5,898,414	4,084,009	4,565,246
Bilingual Education	311,406	313,685	382,817
Bilingual Desegregation	—	175,290	175,925
Follow Through	929,466	554,681	462,926
CRA-IVA	71,626	82,503	53,355
Career Education	33,000	12,000	10,200
Law Education	—	—	—
Women's Equity	142,703	—	—
Public Law 91-230	—	344,900	344,900
Drug/Alcohol Abuse	584,000	604,000	650,000
CETA/JTPA	15,548,990	4,600,000	3,798,800
Child Nutrition	17,000,000	16,500,000	17,700,000
Nutrition Education	108,386	82,823	15,000
Energy Grants	225,669	305,674	261,292
Title XX Day Care	11,573,800	10,679,136	9,677,900
Refugee Assistance Act	212,400	980,340	900,000
Immigration Assistance Act	—	22,984	22,000
Headstart	3,629,703	3,661,330	3,915,300
NEH	57,872	57,872	—
ECIA, Chapter 2 Discretionary	—	—	—
Asbestos (Title V)	—	—	—
Drug and Alcohol(New Legislation Estimated)	—	—	—
Education for Economic Security Act(Title VI)	—	—	—
TOTALS	$113,491,472	$92,953,645	$87,516,145

INFORMAL SURVEY OF LARGE CITY DIRECTORS OF VOCATIONAL EDUCATION
"MATCHING PERKINS ACT FUNDS"
DIVISION OF CAREER AND VOCATIONAL EDUCATION
SCHOOL DISTRICT OF PHILADELPHIA

ching Requirements of the Carl Perkins Vocational Education Act of 1986	1. Matching funds are provided by the State Department of Education	2. Matching funds are provided by the local education agency	3. Matching funds are provided both state and local sources	4. Local in-kind services are used for matching purposes	5. Other (Explain)
ringham, Alabama	X				
sa, Arizona		X		X	
enix, Arizona		X		X	
cramental, California	handicap X			disadvant y	
n Diego, California			X		State matches handicapped only local districts matches disadvantaged
rt Lauderdale, Florida			X	X	Services provided through other departments (intra departmental activities) i.e., Exceptional Student Education, English as a second language instruction. Sub contracted Services with County Government.
					Cooperative Agreements with other State and local agencies.
cksonville, Florida	X				In kind sources in the School Districts are figured in the matching funds at the State level.
dianapolis, Indiana		X			
icago, Illinois		X		X	
s Moines, Iowa		X			And State of Iowa Special Education Funds
sas City, Kansas		X			
chita, Kansas			X		
Orleans, Louisiana	X				Matching funds were provided by the SDE for the first time during 1986-87. I don't know if this practice will continue. If it does not, we will not be able to take advantage of our disadvantaged/handicapped fund
cester, Massachusetts		X			
Louis, Missouri		X			I understand that some places are in process for some relief. However, they are not available yet
ha, Nebraska		X disadvant certain			

The School District of Philadelphia
Division of Career and Vocational Education

P.L. 98-524, The Carl Perkins Act of 1984

Fact Sheet, Utilization of Set-Aside Funds

Title II, Part A

	1985 - 1986		1986 - 1987		1987 - 1988	
	Allocated	Used	Allocated	Used	Allocated	(Projected) Used
Handicapped	759,278	759,278	902,465	902,465	914,906	914,906
* Disadvantaged (including LEP)	1,400,000	454,837	2,351,451	924,264	2,888,106	1,100,000

* Number of eligible disadvantaged students to be served 14,443.
Percent of students being served 41.5%.

Letter From Mary Ann Nobers, Ph.D., Superintendent, School District, City of Clairton

March 26, 1987

Senator Arlen Specter
United States Senate
Attention: Ms. Eartha Isaac
Washington, D. C. 20510

Dear Senator Specter:

We, of the City of Clairton School District, would like to provide input for you to protect monies vital to educational programs.

In the City of Clairton School District we have a 55.7% unemployment rate, a shrinking tax base and yet our community demands on schools to educate its students for a demanding future is ever present.

We find ourselves caught between declining resources and expanding demands. Why would anyone suggest not spending $2.5 billion remaining from 1987 funding?

School districts need not only these monies but new sources of money and ideas to help cities like Clairton help themselves and help others.

Something that should be mandated by the federal government are additional monies to run Drug and Alcohol Preventative/ Intervention Programs in K-12 grades and an Outreach Educational Service to achieving a drug free school, families and affected communities.

I am enclosing some articles of our efforts to achieve a drug-free school. I have no monies in my school district budget for this because my $5.9 million budget is accommodating salaries, fringe benefits and debt service at a 75% rate of the $5.9 million dollar budget. We had to write a proposal to acquire $30,000.00 to address a sensitive drug/alcohol problem in our schools. We need more money and have no where to get it and therefore our students will not understand the detrimental effects of these addictions.

Vocational and Adult Education Programs are needed more today than ever before because traditionally, educational training in Clairton was largely provided by the steel employers through apprenticeship programs. As a result of steel mill closings this education is no longer being done. As a result, a comprehensive, well-coordinated system of training and re-training opportunities involving cooperation of the public and private sectors, is now essential. Please emphasize how sensitive this need, for Vocational and Adult Education funds, is if cities like Clairton are to help people become employable again.

Chapter I is one of our most important programs. This meets the particular need of these identified children but more monies need to be put into these programs for more services.

Special Education is a costly item for our distressed area yet by law we must service these children with some dignity. How can anyone reduce FY87 Special Education appropriation?

William Bennett should visit the City of Clairton School District to see our operation without money. Our children are certainly dependent on other monies if any relevance will be provided for their education.

I hope our letter has an input of how much is needed by districts like ours who have so little.

Thanks for asking for our input!

Sincerely,

Mary Ann Nobers, Ph.D.

Mary Ann Nobers, Ph.D.
Superintendent

Letter From H. Dale Winger, Superintendent, Frazier School District

March 27, 1987

The Honorable Arlen Specter
United States Senate
Washington, D.C. 20510

Dear Senator Specter:

Responding to your letter of March 20 pertinent to Secretary Bennett's budget, I am listing below the impact of several items on this school district.

1. The proposed budget cut in special education funds for FY 88 would be a serious error. We are experiencing a substantial increase in the need for special education services because of federal and state regulations, court orders and an increase in the number of students with handicaps who are entitled to these services. A cut in funding will deny these services to young people who literally need them for survival.

2. The proposed Chapter 1 voucher plan would create chaos in this school district. There would be competition for funds among schools, both public and private; disputes with parents over allocation of funds, transportation costs, testing, etc.; questions about the accreditation of private schools; dilution of funds that would force some existing programs out of business; general confusion over attendance, accountability and other factors now handled by the public schools. No matter what the Secretary may say, it is an unworkable idea.

3. The proposal to reduce vocational and adult education funds in FY 87, and to eliminate them altogether in FY 88, would be a serious blow to all schools in this area. We are attempting to provide vocational training for young people enrolled in public schools and for adults who need training and retraining to secure jobs. To reduce and eliminate vocational funds would be the death knell for vocational programs at the

very time, particularly in this area, when they are vital to economic recovery. I simply can't believe that the Reagan administration could be serious about this budget item.

I hope these comments will be helpful as you consider Secretary Bennett's education budget for FY 88.

Sincerely,

H. Dale Winger
Superintendent

LETTER FROM DR. JOHN J. ZIMMERMAN, SUPERINTENDENT, MONTOURSVILLE AREA SCHOOL DISTRICT

April 1, 1987

Honorable Arlen Specter
United States Senate
Washington D. C. 20510

Dear Senator:

I am responding to your request for information on the impact of reductions in the federal budget for education on our school district.

Before I respond specifically to your request, I would like to share the following information with you so that my comments can be kept in proper perspective. During the 1986-1987 school year, we expect to receive $132,543 of federal revenue which constitutes 1.8% of our total general fund budget. These federal monies will be received in the following categories:

ECIA, Chapter 1	-	$108,482
ECIA, Chapter 2	-	21,504
Vocational Education Act	-	1,748
EESA, Chapter II	-	809
Total		$132,543

Obviously, the two federal programs that have been most beneficial to our school district are ECIA-1 and ECIA-2. ECIA-1 has allowed us to conduct a successful elementary remedial reading (grades 2-4) program and a middle school remedial reading and a remedial math (grades 5-8) program for educationally disadvantaged students. However, the district has consistently contributed $10,000 to $15,000 annually from the general fund budget to operate these remedial programs. In addition the monies received from ECIA-2 has allowed us to keep up with changes in state-of-the-art instructional technology on an annual basis.

The remaining federal programs have not had a significant financial or educational impact on this district, and one in particular (the Vocational Education Act) has required an inordinate amount of administrative time and energy to meet the paperwork requirements in order to receive a rather small appropriation.

We have just begun the process of taking over (from the Intermediate Unit) the operation of special education programs for mildly handicapped children. We took over one elementary level multi-categorical resource room during the 1986-1987 school and will take over another similar program during the 1987-1988 school year. We are doing this on the recommendation

of the I. U. because their funds have been seriously cut and they have been unable to start new special education programs needed in the local school districts. Therefore, an increasing burden is shifting to the school districts in this area.

From our perspective, we would request that you consider using your influence to resist federal budget reductions as they apply to ECIA-1, ECIA-2, and Special Education. It is our opinion that this view would be shared by many other superintendents of smaller school districts. (Our student enrollment is 2,300.)

One other area that I would like to comment on is the proposed voucher system program for Chapter I. It is our opinion that if the voucher system is made available to parents, certain school districts will be required to provide the necessary remedial services to the most seriously disadvantaged students with a further reduction in the resources that would be available to them to provide those services. In my opinion this would seriously inhibit the ability of some districts to provide these necessary services.

I sincerely hope that some of this information will be useful to you. I appreciate this opportunity to share this information with you.

Sincerely,

Dr. John J. Zimmerman
District Superintendent

LETTER FROM OSCAR W. KNADE, JR., SUPERINTENDENT, WILLIAMSPORT AREA SCHOOL DISTRICT

April 1, 1987

The Honorable Arlen Spector
United States Senator
331 Hart Senate Building
Washington, D.C. 20510

Dear Senator Specter:

I am writing in response to your letter of March 20, 1987, regarding cost reductions or legislative changes being proposed in the Education Department's FY 1987 and FY 1988 budgets.

Specific responses to proposals listed in your letter are as follows:

1. Drug-Free Funding -- It is estimated the Williamsport Area School District will receive an allocation of $2.50 per student in 1987 -- or $18,500. Cutting this appropriation in 1988 by one-half would mean reducing the district's drug and alcohol prevention program by that same percentage. We have utilized the FY '87 funding to support drug and alcohol prevention education from kindergarten through the 12th grade and together with local funding it is hardly enough to meet the problem. It is further difficult to comprehend why the President and Nancy would receive so much media hype upon announcing the program and then have the President turn around and dictate a reduction.

2. Science and Math Education -- The School District received $3,600 for the current year for teacher training in these two subject areas. It is now proposed in Congress that math-science be folded into a new education initiative to cover all disciplines -- with the same appropriation of $80-million. If the School District received $3,600 under current provisions, how much could it expect if the same amount of money had to include other disciplines. Funding as recommended would all but wipe out the School District's participation.

3. Impact Aid Part B -- If this proposal -- to eliminate Part B payments for Low Rent Housing students -- is adopted, the Williamsport Area School District would lose funds it has been receiving in lieu of taxes on federal property for a number of years. Elimination of this funding is proposed even though the number of "special needs" children residing on those properties has increased dramatically with the passage of P.L. 94-142. The funds received under Impact Aid legislation should be increased so school districts can better meet the ever-increasing obligations placed on them by Congress. It is a case of mandates without sufficient funds to meet the mandates.

4. FY '87 Special Education Appropriation -- It is inconceivable that ED would consider cutting special education funds in light of difficulties being encountered by school districts in meeting increasing demands for special education students -- especially those being made by public interest law centers. The number of students identified as needing special education is placing the Williamsport Area School District in a financial bind -- a bind which will become even more stringent if special education funds are reduced as contemplated. A startling statistic in Williamsport points out that 2.3 percent of the student population in 1969-70 was identified as qualifying for special education. Today, that figure stands at 8.5 per cent. Even with current funding levels, the school district does not receive excess costs required in educating special education children. If there is any type of priority for funding educational programs, special education must rank very high, especially since congressional advocates regard this program as sacred.

5. The Voucher Progam -- This proposal is utterly nonsensical and keeps cropping up at each congressional session. It is not educationally feasible and should be laid to rest once and for all. Enough said.

6. Vocational and Adult Education Funds Would Be Reduced in FY '87 and Eliminated in FY '88 -- Although vocational funds for the disadvantaged are welcome by the school district, restrictions placed on the School District by Carl Perkins Act are too restrictive to be worth the trouble it takes to submit proposals. I would recommend that vocational education guidelines for program implementation be reviewed and revised to make them more applicable to school district proposals. Adult education programs in the Williamsport Area School District have proven very successful in the last decade, but are in jeopardy as federal funds dwindle or are eliminated.

   The School District puts these funds to good use providing education for adults in the basics (particularly reading and math) in the community and the Lycoming

County Prison, as well as giving adults the opportunity to gain high school equivalency diplomas. Current statistics show the School District is providing adult education to 400 persons and that 125 of them are expected to acquire GED diplomas. Other interesting statistics which bear out the need for adult education funding show that 27 percent of the population of Lycoming County (of which Williamsport is the county seat), have never completed a high school education and 7,500 have quit school at the fifth grade or lower. Adult education programs in the School District depend soley on federal funding. If these funds are eliminated the employed and underemployed will be unable to acquire basic skills they require -- in some instances to eke out a meager existence.

We repeatedly hear and read that education does not produce quality workers necessary to maintain American competition with foreign countries. Reducing or eliminating funds will not solve this problem. Perhaps it is time to discover how we can improve our educational system rather than trying to say education is not working so why spend the money.

I share your concerns about these proposals and trust the aforementioned information will assist you in any efforts you may take to protect vital education programs in the Education Department. We in Williamsport will be looking for your input in the Senate in protecting our interests.

Sincerely yours,

Oscar Knade

Oscar W. Knade, Jr
Superintendent of Schools

Letter From Russell Strange, Superintendent, Penn Cambria School District

March 31, 1987

The Honorable Arlen Specter
2031 Federal Building
1000 Liberty Avenue
Pittsburgh, Pennsylvania 15222

Dear Senator Specter: IN RE: 1987-1988 Budget of U. S. Dept. of Education

Thank you for the opportunity for input regarding federal funding of education.

As one who attempts to operate as a fiscally responsible educational leader, I have some empathy for Secretary Bennett's proposals to reduce costs. Specifically, the following proposals would not be seen as overly disruptive to our local programming:

1. Reduce Drug-Free School funds by 50 percent.

2. Eliminate Impact Aid Part B funds.

On the other hand, I am much less understanding of other proposals.

3. Funding for Science and Mathematics dropped locally from $1906 in 1985-86 to $826 in 1986-87. To expand coverage to all disciplines would enable districts to address their local needs, but at least 85-86 levels of funding should be reinstated.

4. Special Education services, of course, are provided through Intermediate Unit 08, however, the number of students in our district receiving those services increases annually in spite of some reduction in overall enrollment. To reduce this appropriation could seriously hinder the level of services provided.

5. I am opposed to any voucher plan. The Chapter I funding has dropped from $232,000 in 1979-80 to $179,000 in 1986-87. The number of pupils in need of service has not declined.

6. Handicapped Education funds should be distributed through state grants to remove architectural barriers. We are facing up to $90,000 in costs to access our second floor to wheelchair students.

7. Vocational and Adult Education funds should not be reduced. Our area would be devastated. Half or more of our adults are retired, unemployed or underemployed. Vocational education is a vital part of our high school curriculum--both in-house and through Admiral Peary Area Vocational-Technical School. We need more, not less, funding.

If further information is needed, contact us. We'll be happy to do some research.

Sincerely,

Russell Strange

Russell Strange
Superintendent

Letter From John W. Holbert, Superintendent, Quakerstown Community School District

March 27, 1987

Senator Arlen Specter
United States Senate
Washington, DC 20510

Dear Senator Specter:

This is in response to the memo distributed under the date of March 20, 1987, relative to the Education Department's budget for fiscal year 1988.

Obviously, if all proposals are enacted as suggested, it will have an adverse effect on the school district in terms of possible funding. Specifically, I would highlight the following areas of concern: Drug-Free School, Special Education/ Handicapped Education, and Vocational and Adult Education.

- Drug-Free School Funds

  Quakertown has been a leader in Pennsylvania in working toward freeing our schools of drugs. We have one of the first Student Assistance Programs in the state, and it is being used as a model throughout the Commonwealth. We have not received funds up to this date to assist us in this very important endeavor; and it appears, if the proposal goes through as suggested, we will not realize any funds at all to assist us with this on-going concern.

- Special Education/Handicapped Education Appropriations

  Special Education/Handicapped Education has become one of the most expensive programs we provide. Of course, much of the programs are funded through the state and the intermediate unit. To have this cut back would severely affect these services.

- Vocational and Adult Education Funds

  Quakertown has noticed an increase in student interest in the vocational programs that our district offers. Any reduction in funds would adversely affect these programs.

  In regard to the adult education program, we recognize the fact that there are more and more adults without children in school. Consequently, we feel an obligation to provide additional services whenever possible. We are currently working on a literacy program for those adults that need this type service. Again, a reduction in this area would ill-affect our program.

As a growing district and one with a low aid ratio, our federal and state resources are very limited. The majority of our efforts come from the local constituency. Any decrease in federal funds in the areas mentioned above would certainly have an adverse effect on this district. It may ultimately determine whether or not these programs will be provided at the current level of service.

Thank you for allowing us the opportunity to provide input on the Department's budget proposal and for your continued efforts to protect vital education programs.

Sincerely,

John W. Holbert
Superintendent

LETTER FROM DR. RICHARD B. SHELTON, SUPERINTENDENT, WAYNESBORO AREA SCHOOL DISTRICT

March 31, 1987

The Honorable Arlen Specter
U. S. Senate
Washington, D.C. 20510

Dear Senator Specter:

I would like to respond briefly to your request for input based upon the proposed federal budget allocations for education during fiscal year 1987.

There is a great need to continue and increase federal support for education. While we as educators need encouragement, a sense of worth and support from the federal government, there is also a great need for additional expenditure in specific areas, since state and local governments do not have the resources or can marshall a national commitment.

Specifically,

1. States need resources to coordinate and enhance local district efforts in providing students with the weapons to combat drug abuse and dependency. We currently support Peer Advocate Programs, Chemical People, Counseling Programs, Crises Intervention Programs, and Here's Looking at You Two program and various other health and intervention programs. Without assistance from the federal government, a number of these programs would be severely restricted or eliminated.

2. $80 million barely provides an impact for local districts in the areas of science and math. I would suggest a greater commitment or redirect the money to other areas. For example, our district's share of this money last year was approximately $2,000, which we turned over to an IU consortium for all twenty-five districts. The return benefit was minimal.

3. We have gone from $80,000 a number of years ago in Impact Aid to $8600. For our particular district the loss would not be felt. However, there are districts who depend on Impact Aid that would need to make abrupt adjustments to the loss. Secondly, I feel that the Waynesboro District should receive adjustments for the considerable number of government employees who live in our district and work at Fort Ritchie and Letterkenny.

4. Special Education continues to expand for all districts. The number of special education children continues to increase as well as costs for their education. Given the environmental issues affecting birth defects, chemical dependency, broken homes, etc., a greater percentage of our children are entering school with critical needs that are usually determined to be in the LD, EMR and/or SED classifications.

5. Chapter I has been one of our more successful programs. To spread the resources of this program through a proposed Voucher Program would be ill advised.

6. Restrictions on the use of handicapped funds has made this categorical money extremely difficult for local districts and IU's to use effectively. I think the whole legislation dealing with Handicapped Funds needs to be reviewed. Most small and medium size districts do not have the personnel or the numbers of students to implement an effective program.

7. I have mixed feelings about vocational funding. The levels of expenditure should be maintained; however, we as educators need to evaluate and define more precisely what it is that vocational education is to provide for our students. I am not sure that the skills we are able to provide in our vo-tech schools and district shop classes are providing employable skills for our students.

Thank you for this opportunity to ramble about school funding. I would be happy to discuss this with you in more detail.

Sincerely,

Richard B. Shelton

Richard B. Shelton, Ed. D.
Superintendent of Schools

Letter From Richard A. Cunningham, Principal, Ridley School District

April 2, 1987

Senator Arlen Specter
United States Senate
Washington, D. C. 20510

Dear Senator Specter:

I have been an educator for over 24 years and have been involved with adult education for 22 of those years. Many of my most memorable experiences have come as a result of assisting adults with learning. During this period of time there has never been a lack of adult learners in need of service. In fact, the number of adults wishing to improve their basic skills or prepare for a high school equivalency examination has steadily increased.

With the major problems that exist with today's families, unemployment and drug abuse, it is almost unbelievable that the nation's Secretary of Education, William Bennett, would propose budget cuts for programs designed to improve adult literacy and subsequently improve chances for an individual to support his family and lead a more productive life. To cut funds entirely, is an utterly unbelievable prospect, for such cuts would result in the failure of adult education projects designed to help people help themselves.

Please convey my disappointment over the prospects of a cut in funding or the total elimination of programs for adult education.

Sincerely yours,

Richard A. Cunningham
Principal

Letter From Richard C. Wallace, Jr., Superintendent, Pittsburgh Public Schools

April 2, 1987

Honorable Arlen Specter
U. S. Senate
331 Hart Senate Office Building
Washington, D. C. 20510

Re: U. S. Department of Education's Proposed FY 88 Budget

Dear Senator Specter:

In response to your letter of March 20, 1987, the Pittsburgh School District would suffer the following reductions in federal funding if the fiscal year 1988 budget proposed by the U. S. Department of Education became law:

-Vocational Education	$1,300,000
-Impact Aid (Part B)	150,000
-Handicapped Education	100,000
-Math/Science	100,000
-Drug Education	40,000
TOTAL LOSS	$1,690,000

This would constitute a 9% reduction in the current level of funding being received from the U. S. Department of Education.

The Congress correctly has ignored the fiscal 1987 rescission requests that accompanied the 1988 budget. In addition, the Congress has begun to shape a 1988 education budget of its own.

The Department constantly reminds us that education is a state and local responsibility. That is basically correct, but there is a legitimate role for the federal government to play in promoting the general welfare and providing an added degree of assistance beyond that which a state or local community can provide.

I cannot believe that the Department is proposing to abolish all federal assistance for vocational education. In Pittsburgh, federal vocational funds are used basically for specially-designed training programs for disadvantaged students. This gives us tremendous help in meeting a serious and pressing problem. It also aids in our dropout prevention efforts.

The 99th Congress gave added emphasis to serving handicapped children, especially those of preschool age. The Department would cut the basic handicapped grants to the states as well as the preschool grants. I don't believe the Congress intended to provide new handicapped services without helping local school districts to meet at least a reasonable portion of the additional costs.

In other aspects of the proposed budget:

-We need to concentrate on improving math/science rather than spreading the very limited federal funding to cover all disciplines.

-Impact Aid (Part B) gives us the flexibility to use such funds to meet changing needs.

-Federal Drug Education was initiated by the 99th Congress and the President. Funds have not yet reached the local level. We are puzzled by the proposed reduction in the level of funding at this early stage of the war on drugs.

Hope this information proves useful to you. We look to the Congress to retain education as a priority item on the federal agenda.

Sincerely,

Richard C. Wallace, Jr.
Superintendent

Letter From Dr. James E. Replogle, Superintendent, Boyertown Area School District

April 1, 1987

Senator Arlen Specter
331 Hart Building
Washington DC 20510

Attention: Ms. Eartha Isaac

Dear Senator Specter:

Thank you for inviting me to comment on several components of the education budget proposal. While not every part of that budget has great meaning for this school district, several components do. It is on those matters which I will comment.

Science and Mathematics Education Program

This program has yielded about $1600 to the Boyertown Area School District in the current fiscal year. For a district with 340 professional employees, this is a very small sum of money, even when it is limited to science and mathematics. To put this sum to a practical use, many schools districts in our Berks County Intermediate Unit combined their funds to offer staff training to science and math teachers on a consortium basis. In doing so, we feel we have derived real benefits from the fund. Because the amount of money is so limited, to expand it to cover all disciplines would make its contribution essentially inconsequential.

Special Education

For whatever reason, more and more youngsters qualify for special education services each year. This is true despite declining enrollments in general. The Berks County Intermediate Unit, which provides the bulk of the special education program for our students, is underfunded and inadequately equipped to serve the real needs of our young people at the present time. Unless the Commonwealth is prepared to find new sources of funding for special education, a reduction of federal level support would exacerbate an already serious problem.

Chapter I Voucher Program

This proposal is essentially meaningless to parents in a rural area such as ours, and I suspect is so for most parents across the country. The fact is the public school is the only option for most youngsters, and because the public school is controlled to a large extent by a locally elected school board it provides the level of service which the community really wants. A voucher program in Chapter I or general education would have little or no impact here.

Vocational and Adult Education

You would be very impressed if you could see how our Berks County Vo-Tech schools have been able to acquire up-to-date equipment for the various shops, in large part due to the support of federal funds. Students trained in state of the art shops are most employable in the job market. To some extent, the same thing can be said about business education classrooms in our own high school. The planned elimination of vocational and adult education funding is counter-productive, in my view, because it undermines the adequacy of training of our future work force.

I am personally gratified that you have serious concerns about these proposals and I encourage you to continue your struggle to maintain a basic level of support for public education. Please call on me at any time when you feel I can be of help.

Sincerely yours,

James R. Replogle

James R. Replogle
Superintendent

LETTER FROM FRANK A. RACKISH, EXECUTIVE DIRECTOR, SENECA HIGHLANDS INTERMEDIATE UNIT OF EDUCATION

April 1, 1987

The Honorable Arlen Spector
United States Senate
331 Hart Senate Office Building
Washington, DC 20510

Dear Senator Spector:

In letters dated March 20, 1987, to school district superintendents, you asked for their assessment of the effects of Education Secretary Bennett's budget request on specific programs. Because the Intermediate Unit operates special education, Chapter 1 remedial reading, and vocational programs for districts, several superintendents referred their letters to me for a response. Cost reductions in the following areas will affect districts in this Intermediate Unit.

1. Drug-Free School funds. Presently, there are increasing pressures for available resources. Recent changes in curriculum requirements have resulted in increased costs. Simultaneously, programs for social needs such as drug and AIDS education have increased. Schools cannot meet needed social requirements without assistance from state and federal governments.

2. A reduction in federal funds for special education would almost surely mean programs for fewer students. Special education enrollments are rising; the State is really providing only enough money to maintain existing programs. We have established classes with federal funds and provided related services such as testing

and occupational and physical therapy. We also use the funds for transportation and for students returning to special classes from institutions. Less federal money will mean fewer students served at a time when the call is to serve more.

3. Voucher program for Chapter 1. Our response will be rhetorical. Public schools must accept all students and are held accountable for Chapter 1 expenditures and student performance. In all voucher proposals to present, their competition has received unfair advantage. Private schools should probably receive federal funds after public school needs are met.

4. Vocational and Adult Education. It seems ironic that funds for the two programs are to be reduced when the goal is to provide skills to secondary students and adults to make them employable. Contrary to perceptions of people in the Department of Education, vocational programs are needed. Not all students have or can be convinced to have lofty educational goals.

   We have more, not less, need for funds for adult basic education, a popular program here.

I hope that these responses will assist you as you consider Administration budget requests.

Sincerely yours,

Frank A. Rackish

Frank A. Rackish
Executive Director

Senator SPECTER. Thank you, Mr. Chairman.

Senator CHILES. Thank you.

Mr. Secretary, with the widely shared interest in educational reform, I am puzzled to see your proposal to eliminate the Math-Science Program. We have recently been inundated with the studies on the substandard performance of American school children in mathematics and hard science. In fact, about 50 percent of our students and graduate schools now are foreign students.

I asked the chancellor of my State university system whether this was true of Florida schools. It is only about 46 percent. I asked him why that was true and whether any Florida students are being denied a place by the fact that these foreign students were there. He said no, they are not qualified. Rather than operate the schools, the classes, without optimum enrollment and have the best professors and have the best labs, they go ahead and take these students from foreign schools.

I asked him what we were charging them, and he said we are charging them out-of-State tuition. I asked how much subsidy there was in that, and it is roughly 40 to 45 percent. So we, in fact, are paying Japanese engineering students and others to go back and beat our brains out in trade because our kids do not have that math and science at the lower levels. Congress has passed this program or targeted it. We feel that it is important.

Why would you propose to zero that out in favor of a national teacher training initiative for all disciplines?

Secretary BENNETT. Because we think that will hit the mark better.

I agree with you about the diagnosis of the problem, and the real solution is, in the end, neither Federal program, but just some clear sense on the part of the State.

I hope you also ask your State officials what the requirements are for math and science in the schools, because we found that in 1983 only one-quarter of our graduating high school seniors had taken a course in physics or chemistry; one-quarter.

Senator CHILES. Florida has changed and made the most stringent requirements, I think, of any State now in regard to their schools.

Secretary BENNETT. I congratulate your State. That will bear fruit.

Senator CHILES. But, you know, if there are not teachers for this—right now, the private sector will buy off any teacher that is out there.

Secretary BENNETT. That is part two. There are loads of people who are ready to go into America's classrooms. We just saw a survey. Seventy percent of retiring people in business and industry with technical backgrounds said they would be happy to go into our classrooms. Seventy-nine percent of retired military with these backgrounds would be happy to go into our classrooms. They are not made to feel welcome in our classrooms. They are not eligible to be in our classrooms in most of our States because of ridiculous certification requirements.

In many States in this country, a teacher who is a member of the union or the professional organization has the first chance to teach that

math or science course over someone whose training is in that area but who is not a member of the professional organization. We have the manpower to do this if we would just respond to this in the right way at the State level.

TEACHER DEMAND AND SUPPLY

Senator CHILES. Well, we know the demand for teachers has been rising, and that supply has been shrinking. Women and minority groups, the traditional groups from which teachers have emerged, now have wide opportunities in higher paying fields. It seems to me that without trying to really do some outreach there, we are not going to be able to provide teachers, the kind of teachers that we need.

Secretary BENNETT. Our data and the Labor Department data suggest that we will not have supply problems in the near future or even as far as we can see. A greater interest in teaching was declared by college freshmen last year and the year before than we have seen in some time.

Once again, if you count as part of the eligible pool of teachers people who are capable in the subject matter, with an ability to teach and a reputable character, we would not have a problem at all. Again, it is many of these idiotic certification requirements that are keeping many qualified people out of our classrooms.

We plan to keep up the heat and the drum beat about teaching as we have been doing.

PROPOSED ELIMINATION OF VOCATIONAL EDUCATION FUNDS

Senator CHILES. We understand your rationale for proposing the elimination of the Vocational Education Program is that the needs are going to be met by the Department of Labor under a new and expanded program. Unfortunately, when we total all the funding proposed by the administration for training, we see a net reduction of some $300 million for 1988.

Fifty percent of the Federal vocational education funds are limited to programs that assist the socially disadvantaged populations. While the Department has argued that the Federal dollar is only 1 in 12 for vocational education, for vocational education programs addressing the handicapped, the disadvantaged, and the students with low-English proficiency the Federal share is much higher, almost one-third.

Additionally, the Department of Labor's Job Training Program is for workers that have already lost their jobs. The primary beneficiary of vocational education is those kids that have not received that first job yet.

Is it not shortsighted to argue that we have to terminate the Federal effort for tomorrow's workers in order to train the workers that have already been displaced?

Mr. CARNES. Mr. Chairman, like all of the decisions we made, this was not an easy one to make, and it is not a statement of our opinion on the quality of vocational education. It is a matter of having to deal with budget circumstances and having to allocate the available resources the best way we could.

We fought to the very end to avoid having to make a decision for this kind of reduction in vocational education. What we had to try to decide was among all of the agencies and beneficiaries that we support which ones get the most support from other sources; in other words, in which one the Federal presence is the least. The Federal presence in vocational education amounts to 1 to 2 percent, if that, of the money spent for vocational training in this country.

Senator CHILES. Is it not a pretty important 1 or 2 percent? Does it not trigger direct encouragement? Does it not promote new direction? That, to me, is why it is so important.

Mr. CARNES. We are not saying that it is an undesirable thing to have the Federal Government in vocational education.

What we are trying to say is that in a circumstance such as this, we are having to make decisions about what is desirable and distinguish that from what is applicable and necessary. The way we had to come down on the issue of vocational education was that it was desirable for the Federal Government to have a role there. On the other hand, we do not feel that other areas of the budget should be cut further in order to put more money into vocational education.

Senator CHILES. Well, given the fact that you have been assigned to perhaps 30-percent cuts to come out of education, I expect this was a free one because there is no way that you knew that Congress was going to go along with it. So it is a wash.

Senator Weicker.

Senator WEICKER. I will be very brief because I know that my colleagues have just arrived, and the Secretary's time is limited.

TIMING OF HANDICAPPED PROGRAM AWARDS

I want three specific responses to a matter which I raised earlier. What is the status of the funds for the Early Intervention Program? When will those funds be released?

Mr. CARNES. The Early Intervention Program funds will be obligated before the end of the fiscal year. The NPRM will be published on May 10 or shortly thereafter.

Senator WEICKER. What is the status of the preschool grant funds?

Mr. CARNES. Preschool grants will be awarded in July.

Senator WEICKER. As I understand it, those are forward funded so there is no reason why those should not be pushed out by July 1. Would that be a good time period?

Mr. CARNES. I will verify that for you and get back to you.

Senator WEICKER. Last, what is the status of the supported employment funds?

Mr. CARNES. The preschool grants will go out in July. The supported employment awards will go out before the end of the fiscal year, early intervention in July.

Senator WEICKER. Early intervention in July, preschool grants in July; why the delay in supported employment?

Mr. CARNES. As I was explaining earlier in our discussion, the area of supported employment was one where we felt that it was necessary to develop regulations in order to provide the guidance that many States were seeking in the area of supported employment.

Senator WEICKER. You did not require that on drug funds.

Mr. CARNES. That is right. It was a judgment call, and we felt that the statute and the intent were clear enough in the drug program that that money could be obligated, and States could go ahead and run their own programs.

The nature of the drug program's operation is different from that of supported employment.

Senator WEICKER. So these will go out before the end of the fiscal year?

Mr. CARNES. Yes, sir.

Senator WEICKER. I have no further questions.

Senator CHILES. Senator Bumpers.

NEH SUMMER SEMINARS FOR TEACHERS

Senator BUMPERS. Mr. Secretary, when you were at the National Endowment for the Humanities, you were a strong proponent of the summer seminar programs for secondary teachers. I believe these seminars received some startup funds from the Mellon Foundation. Is that correct?

Secretary BENNETT. I was not only the proponent, I was the architect of the program; yes, sir.

Senator BUMPERS. You were the architect of the NEH program?

Secretary BENNETT. Yes.

Senator BUMPERS. What is the status of the NEH seminar programs? I realize these programs are not in your jurisdiction, but I am sure you keep up with them.

Secretary BENNETT. I am not sure. I think they are still running. I am not sure what the numbers are now, but we had it up to, I think, about 100 or 150 seminars each summer. I am not sure what the numbers are now.

Senator BUMPERS. Did you think they were meritorious?

Secretary BENNETT. Yes; I thought they were good. I have to admit. I was partial. That was my idea. But given the response of teachers to it, I thought it was quite good. I thought it filled a gap.

Many teachers have opportunity for enrichment in the summer, but much of it is not intellectually serious.

CONTINUING EDUCATION PROGRAMS FOR TEACHERS

Senator BUMPERS. Well, let me ask you this question. I am sure you are very familiar with the outpouring of studies on our educational system. I believe "A Nation at Risk" was the first story, but dozens more have followed.

Perhaps the reports are not altogether accurate, but if we are a nation at risk, one of the things that is important is continuing education for

the elementary and secondary teachers already in classrooms across this country.

Would you agree with that?

Secretary BENNETT. As it stands now, yes, although I would argue that since a lot of that education ends up being remedial, that is, filling in gaps that should have been filled earlier, the real need is to change the way we educate people who become teachers.

Senator BUMPERS. You are not going to get rid of a significant number of those teachers in the next several years.

My point is, what are you going to do to keep them in the classroom and improve their skills?

Secretary BENNETT. Actually, you will see a fair amount of retirement in the next few years. I agree with you that we need to make efforts for those teachers who are in the teaching course now to strengthen their ability to teach. Yes, sir; I agree.

Senator BUMPERS. You agree with my Governor, for example, on teacher certification and teacher testing?

Secretary BENNETT. Yes, sir; and I must say Arkansas deserves particular credit for putting math in their tests, unlike Texas. That is why the failure rate was higher in Arkansas, but it was bolder in Arkansas.

Senator BUMPERS. Let's go back to the summer humanities seminars for secondary school teachers.

Secretary BENNETT. Right.

Senator BUMPERS. I have introduced a bill in each of the past three Congresses, which was never enacted, primarily because of budget constraints. It was a $50 million program which would have established on a national scale the NEH Summer Seminar Program.

It is based on the simple proposition that we are graduating an awful lot of kids who know about the genetics of the apple and orange, but who know nothing about the political process, the Constitution, literature, drama, arts or any of the other things that I think are equally important to the strength of the Nation.

TEACHER TRAINING AND IMPROVEMENT BUDGET REQUEST

Now, I look at your budget for teacher training and improvement, and I see here that you propose $72.8 million for teacher training and improvement in fiscal year 1988. I don't believe any of the teacher training programs are targeted to humanities teachers.

Mr. CARNES. That program would, in fact, allow teachers in all fields, including the humanities, to participate. It is an expansion of the idea and the program that the Secretary started at NEH. In the current Math-Science Program, Christa McAuliffe herself would not have been able to be supported in the program.

What we wanted to do in this program was to give grants to the States, and let the States decide where their critical shortages of trained personnel were and train teachers in those fields, whether they are math or literature or history or political science or chemistry or biology. The training could be modeled on the seminar model just as we did before and just as you suggested.

It would make it allowable for States to do it in all disciplines, not just math and science.

TEACHER EDUCATION PROGRAMS

Senator BUMPERS. It is troublesome to me that preliminary figures indicate that only about 8 percent of the kids between 18 and 24 bothered to go vote last November. You read stories like the ones Haynes Johnson, David Broder, and Paul Taylor did in the Washington Post this morning about how children are alienated and disenchanted with the American political system.

It's not surprising that they're disenchanted when we do so little to teach them about American government.

Secretary BENNETT. Again, I was happy to start those programs at the Endowment, but one could also say that it was a comment on the failure of our preparation of teachers that we had to set up that kind of program.

Senator Chiles was talking about math and science. You are talking about the humanities. Although I started that program in the humanities, I have to say this in looking at the numbers. I saw a figure the other day. About 10 percent of the people who teach in American high schools have had one course or more in science at the college level. That is a pretty bad figure.

Now, what does that suggest? It may suggest to some of us that we need to have some summer seminars in science for our teachers. I think it suggests, however, a more radical kind of remedy, which is, what are people taking in college if not college level courses in science. If not college level courses in the humanities?

The need, I think, is for both, but I would say—if I had to say where is the more critical need, I think I would probably tilt in Senator Chiles' direction. There needs to be much more science education for our teachers, particularly our science teachers at the college level.

We have made this program level open, whatever disciplines the State feels it needs to emphasize, but I would say the real lacunae are in the science education area now.

Senator BUMPERS. One of the things I would like to do with my humanities bill is to open humanities training programs to science and math teachers because those teachers can casually impart the humanities to students, even in math classes.

HIGH SCHOOL GRADUATION REQUIREMENTS

Secretary BENNETT. Yes, sir; I think, again, State requirements and your Governor are at work on this, as many Governors are. But this is, again, I would say the most important factual comment on the general area you are talking about, the Haynes Johnson column and other laments that have been offered. Last year the average high school graduate in America had probably 1½ years of history for his first 12 years of education. It is just not enough. It is just not nearly enough.

We can come up with patchwork programs. We can come up with things to try to respond to this. There is not going to be a solution that is really going to fill the bill until States decide that when you graduate from high school you will have had 4 years or 6 years or 8 years of history.

POSTSECONDARY LIBERAL ARTS DEGREES

Senator BUMPERS. I spoke to an honors convocation of the College of Business Administration of the University of Arkansas the other night, and I did not ingratiate myself with them. I made the point that when my daughter graduated from college 2 years ago, the bankers in New York hired all of the English majors on the proposition that they could teach anybody to be a banker. They were looking for students who could write a complete sentence and speak a complete sentence.

I understand that there are some universities in this country that are saying, go ahead and get a liberal arts degree in political science or whatever you want and then get a master's in business.

Does that make any sense to you?

Secretary BENNETT. I have not looked at the latest data, but studies we did a couple of years back suggest that a liberal arts degree by itself, if it is a good liberal arts degree, will stand you in very good stead. In some cases the business degree following can add to your employment opportunities immediately after graduation. Over the long run, a liberal arts graduate does very well.

The University of Texas did a survey. I should be kind to Texas here. The liberal arts graduates 5 years out of college were not doing as well as their business school graduates. Fifteen and twenty years out, they were not only doing as well, they were doing better. By doing better, I mean they were making more money, and their positions were positions of greater responsibility and the like.

So one could argue from that data and other data like it that there is nothing quite as good for you as a sound liberal arts education, prudentially, economically and, one would hope, intellectually and morally as well.

LOCAL CONTROL OF EDUCATION

Senator BUMPERS. Finally, Mr. Chairman, if I may just ask the Secretary a philosophical question. Do you believe that local control of schools is a good idea?

Secretary BENNETT. Yes; for the most part. I think that the State must preserve some interest and some basic requirements, and I think the State in certain circumstances should be empowered and should be eager to act if there is abuse of the child. I do not mean just physical abuse. I mean educational abuse.

But for the most part, I think local control is good.

FEDERAL ROLE IN EDUCATION

Senator BUMPERS. Do you think the Federal Government can keep a hands-off policy and leave education pretty much to the States and local districts?

Secretary BENNETT. Again, it can and should for the most part except where questions of individual rights and equity are concerned as governed by Federal law.

Senator BUMPERS. Well, it is a very difficult question and a difficult point, but does the U.S. Government have an overriding, transcending interest in the kind of education our children get?

Secretary BENNETT. Yes; it has an overriding and transcending interest in the kind of education our children get; no greater though, to anticipate my response to perhaps your next question, than its interest, I take it, in seeing that families operate effectively and efficiently.

To say that the Government has an interest in that, it does not follow from that, that the Government should have much business in that. I think that is the hard question.

Senator BUMPERS. Mr. Secretary, I wish we had a little more time, but I understand you have to leave, and Senator Burdick has some time coming.

Secretary BENNETT. I would be happy to continue on some other occasion.

NORTH DAKOTA'S VOCATIONAL EDUCATION NEEDS

Senator BURDICK. Mr. Secretary, the administration proposed a rescission of all funds for vocational education. North Dakota's general fund is in no condition to assume more responsibility for vocational education; yet in North Dakota vocational education is needed not only by the traditional students but also by individuals who have been laid off or economically forced to stop farming.

For example, in the past 6 years 6,000 farms and ranch operations have been lost in North Dakota, and in 1986 jobs in mining, manufacturing, and construction decreased 11 percent from the previous year. Bear in mind this is a State with a total population of only 660,000. So, you see, this is quite a number.

As a result of farm displacement, some type of training is needed to help these and other individuals become employable. The total number of students directly affected by zero funding in North Dakota is close to 18,000. An additional 18,000 students would be indirectly affected, to say nothing of the impact on teachers and staff.

What alternative sources do you know which exist to help these and other individuals achieve the retraining needed to become employable?

Mr. CARNES. Senator Burdick, I cannot respond specifically at this moment to the facilities that are available alternatives for citizens of your State.

Again, as I mentioned before, the decision that we had to make was not a happy decision. It was, however, a decision that we had to make looking at the totality of our funding resources and the totality of the impact of the various decisions we had to make.

In that circumstance, zero funding vocational education was not a happy decision for us to make. We unfortunately were asked to do so because of the fact that on a nationwide basis the resources available in vocational education outnumber the Federal resources about 99 to 1.

Senator BURDICK. You are aware, of course, that there are thousands of students who cannot afford a formal education, and vocational education fills the gap and gives them something to hang on to, something to make a living on.

Mr. CARNES. Yes, sir.

Senator BURDICK. This is really the bottom. This recommendation, not you, just really pulls out the bottom, I would think.

Mr. CARNES. Well, I cannot respond to what percentage the Federal contribution is of all funding sources available for vocational education in your State, but again there are on a national level, and generally region by region, far, far vaster resources available than the Federal Government ever possibly could have provided. We are only 1 percent of all the effort in this area.

Senator BURDICK. That becomes very important to a State like North Dakota.

Mr. CARNES. Yes; I understand that, sir.

Senator BURDICK. I have some other questions. In the interest of time, I will submit them so that you can reply, and we will put it in the record in a reasonable time.

Secretary BENNETT. We certainly will.

Senator CHILES. There are other Senators that have questions that they would like to submit for the record, and it looks like we are close.

Do you want another minute?

STUDENT AID

Senator BUMPERS. Mr. Secretary, if I could just pursue where we were going a moment ago.

Do you feel that any child who is capable and desirous of a college education ought to receive one?

Secretary BENNETT. Yes, sir.

LOANS AVAILABLE TO STUDENTS

Senator BUMPERS. Why are you cutting back student loans?

Mr. CARNES. Senator Bumpers, the amount of student loan dollars that is available actually goes up under our proposals. The figure that you see in guaranteed student loan proposals reflects the fact that T-bill rates have declined. The amount of the Federal subsidy is based on those rates. T-bill rates have declined. That saves about $800 million in 1 year.

We have a proposal to eliminate the in-school interest subsidy. By the way, I should mention this was first introduced in 1980 by Senator Metzenbaum. We would continue to pay the special allowance, and we would, of course, guarantee the funds; but the total loan volume would go up because we would eliminate PLUS and SLS loan limits. Students

would have more Federal student aid under our proposals than they do under current law.

Secretary BENNETT. Subsidies will go down. Many students under grants will shift to loans. Some students' subsidized loans will shift to unsubsidized loans. We do not deny that, but we think for the capable student who wants to go to college, they will still be able to go.

Senator BUMPERS. Well, I worked a lot when I was in school, and it did not hurt me any. I enjoyed the benefits of the GI bill which I did not have to pay back. The GI bill enabled me to go to a fine university that I could not have possibly afforded otherwise.

I am not suggesting that we ought to afford everyone a cadillac education at whatever university they may choose. My brother and I were the beneficiaries of the GI bill, and we both were able to go to prestigious universities. My father would probably have stolen to see that I got a college education of some kind, but the GI bill made a college education a reality.

ELIGIBILITY FOR PELL GRANTS

Guidelines generally indicate to me that families with incomes over $20,000 are not going to be eligible for Federal grants. Is this a correct statement?

Mr. CARNES. Yes.

Senator BUMPERS. Why is that? Twenty thousand dollars is a very limited income for a family of four, yet you are saying that they are not entitled to a Pell grant?

Mr. CARNES. Yes, sir; first off, 5.5 million students are now getting student aid. That is 45 percent of all the students in the United States. Twenty-five percent of all the students get Pell grants. This is a great expansion of a program that was originally intended to help just the lowest, lowest income individuals.

In fact, loans were originally the preferred source of support for these individuals, for all individuals.

The Pell Grant Program has expanded so that now 1 out of every 4 kids is getting a Pell grant. Our proposal would make it 1 out of every 6 students, which we still do not think is an ungenerous proposal in terms of the number of students getting aid; and, in addition, the average grant to the student would go up.

OTHER FEDERAL STUDENT AID SOURCES

Secretary BENNETT. One brief comment. There still is, if not the GI bill under which you went, and this has nothing to do with our budget and it is very rarely talked about, but it is still there—it is talked about on TV—there is the aid that students can get for college, substantial amounts of aid after service in the military.

Current programs now run by the military and the Veterans Administration are very generous. They still exist.

Senator BUMPERS. The chairman tells me my time is up.

QUESTIONS SUBMITTED BY THE SUBCOMMITTEE

Senator CHILES. We thank you, Mr. Secretary. We appreciate your appearance here. There will be some additional committee questions which we will submit to you for your response.

[The following questions were not asked at the hearing but were submitted to be answered for the record:]

Questions Submitted by the Subcommittee

SECRETARY'S OVERVIEW

DROPOUT RATES

Question: Mr. Secretary, I know since 1983 -- the year A Nation at Risk was published, you have published and brought attention to educational achievement in the Nation's school systems. Last year, nationally there was a small improvement in SAT scores but a small erosion in the high school graduation rates. The results were mixed.

Florida had mixed results too. Florida tied for first place in achieving the greatest improvement in SAT scores between 1985 and 1986, but the high school graduation rate in Florida worsened a full percentage point last year.

In Dade County, for example, the dropout rate varies from school to school -- as high as 48 percent and as low as 7.2 percent -- while the causes for dropouts vary from school to school, and neighborhood to neighborhood. What do you believe can be done to increase the high school graduation rate?

Answer: Improving the high school graduation rate depends on the ability of schools to provide a solid, basic education to all students. Research has shown that many dropouts have academic difficulties before they leave school. This was true well before the recent educational reform efforts that have tightened standards in some States.

Lowering standards and replacing core academic courses with electives is not the answer. During the late 1950's and early 1960's, schools toughened standards and added more substantive courses while the dropout rate fell. The dropout rate increased during the 1970's, when grade inflation, social promotion, and proliferation of non-academic courses occurred.

Recently, there has been a great deal of activity in new dropout prevention and recovery programs. In addition, the Carnegie Corporation, GAO, and the Department of Education are all conducting studies on the effectiveness of dropout programs. One dropout prevention strategy that appears to be effective is the use of incentives to keep children in school. Incentive programs, such as the one started by Eugene Lang in New York City, which promises to pay for the costs at a State or community college if students remain in school and graduate, have been very successful.

For many dropouts, an alternative to the traditional school setting is needed. In Washington, educational clinics, operated by non-profit and profit firms, have a proven track record of success. The key components of the clinics are: 1) diagnosis of each student's academic abilities; 2) individualized, short-term instructional programs based on the diagnosis; and 3) counseling throughout the instructional process and while applying for and interviewing for jobs.

PROGRESS IN EDUCATIONAL REFORM

Question: Mr. Secretary, what is your assessment of the educational reform movement? We have had progress since 1982 with test scores and teachers' salaries. Are you predicting continued improvement?

Answer: Although in the last four years, we have seen considerable progress in raising student test scores and graduation rates, we still have far to go to regain the ground lost during the 1960's and 1970's.

We need to redouble our efforts to improve the schools, particularly when we are seeing attempts by special interest groups to derail the reform movement. Some State reforms are being threatened by the attempts of teacher unions to lower standards, eliminate testing, and turn merit pay into across-the-board raises. In a few States, money problems are being used as an excuse to slow down reform when what is needed is greater resolve to stand up to special interests.

In implementing reforms, I am most concerned that we target our money wisely. As Governor Martinez asserted in his 1987 State of Florida address, "...let's not throw hundreds of millions of dollars at a bloated and inefficient education bureaucracy in the forlorn hope that most of it will trickle down into the classroom." We need to ensure that resources go where they are needed the most, where children will be the beneficiaries, and where they will support practices that have been proven effective.

I believe we will see lasting improvement in American education if we act on our reforms. We cannot afford, however, to drag our feet or allow special interests to undercut our efforts. I see inertia and counterpressure from the educational establishment as a serious threat to progress. Whether the ensuing years will show test score gains and higher graduation rates will depend on our success in putting reform proposals into action.

PARENTAL INVOLVEMENT

Question: Mr. Secretary, your reauthorization proposals for Chapter 1 address the importance of parental involvement in a child's education. Your recent report on Japanese education also highlights the central role of the parent in aiding a child's education. But a dramatically increasing percentage of our students are coming from broken homes where the only parent must work and doesn't have the time and energy, like the Japanese mother, to constantly monitor their child's progress. Many of our new parents are, themselves, teenage dropouts. Given these realities, how can we enhance parental involvement in our children's education, especially when many of these parents are themselves educationally disadvantaged?

Answer: I believe that local school officials must make a concerted effort to reach out and involve parents in the education of their children. This is particularly critical in the education

of disadvantaged children. It is not enough for local school officials just to provide forums such as parent-teacher association meetings as a way to involve parents. They must work actively to bring parents together with the school. This could consist of developing special outreach programs for parents or creating adult literacy programs for parents of educationally disadvantaged children.

In our Chapter 1 reauthorization proposal, we have encouraged increased parental participation by providing more specific guidance to school districts with regard to requirements for written policies on parental involvement, the annual meeting of Chapter 1 parents, and additional activities that may be funded at the request of parents. Our bill also authorizes national demonstration projects that would give the Department a way of testing approaches for increasing parental involvement in the program. Although these activities are aimed specifically at Chapter 1, they would also have applicability for schools that want to involve parents more generally in the educational process.

CHAPTER 1 BUDGET PRIORITIES

Question: Mr. Secretary, you have requested a $200 million increase for the Chapter 1 program and have simultaneously proposed a series of significant changes for the reauthorization of the program. Since it appears that we will not have a reauthorized program until 1989, do you still support a $200 million increase for the current program for 1988? If you do not support the increase for Chapter 1, that would allow you to spend the $200 million somewhere else without exceeding your OMB budget ceiling of $14 billion. Where do you think that $200 million increase could be used most effectively to supplement your budget request?

Answer: Yes, we would still support a $200 million increase for the current Chapter 1 program in 1988. The requested increase would enable the Federal Government to continue its commitment to helping States and localities meet the special educational needs of disadvantaged children.

SENATE BUDGET COMMITTEE RESOLUTION

Question: Mr. Secretary, the Senate Budget Committee has reported to the floor a budget that would spend $6 billion more for education than you recommend. Where do you believe that $6 billion could be used most effectively?

Answer: I continue to urge the Congress to consider seriously the President's budget request. As I said in my statement, we must make reductions in Federal spending because an unreduced deficit would prove ruinous to our Nation and its economy. I also said that under other circumstances, I would be proposing a different budget to you.

If, in fact, circumstances did change and if it were possible to allocate more Federal dollars to education, I would still maintain the priorities reflected in our budget. These include benefiting children at the elementary and secondary levels because

of the critical importance of the early years of schooling; enhancing educational opportunities for the disadvantaged such as the poor, the handicapped, and children with limited English-speaking ability; improving the quality of American education; and teaching basic academic and literacy skills. In order to provide additional funding in these areas, our budget proposes reductions in student aid by focusing assistance on the neediest students who need such aid to attend college, and by eliminating vocational education where the Federal share of total national expenditures is negligible.

Therefore, any budget that I would propose under different circumstances would include additional amounts for such programs as Pell Grants, work-study, Title III aid for institutional development, TRIO special programs for the disadvantaged, vocational education (particularly programs for special populations), and State grants for education of the handicapped and for rehabilitation services. But--and I reemphasize another point I made in my statement--whatever funding level Congress appropriates, we must build in provisions for accountability, so that if a program is not achieving good results, someone is held responsible for making improvements. We cannot afford inefficient and ineffective spending at any total dollar level.

GROWTH IN CHILD POVERTY--TARGETING CHAPTER 1 SERVICES

Question: Mr. Secretary, recent studies have found an increase in the child poverty rate from 16.4 to 19.4 percent between 1979 and 1985. By 1990 it is expected that one in four children will be living in poverty. Has the Department taken a look at the impact these trends will have on the need for greater services from the Education Department and what this increased level of services will cost?

Answer: Yes we have. However, the primary issue that arises from this analysis is how best to spend the limited resources that we have. Since the program's inception over 20 years ago, the need for compensatory education services has always exceeded the Federal Government's capacity to finance that need. Given the continuing problem of the Federal deficit, it is fair to assume that the annual funding growth for Chapter 1 after inflation will not be more than three percent and that a significant proportion of the needy population will remain unserved.

This situation points up the need to target available Chapter 1 resources on school districts, schools, and children most in need of assistance, so that available funds will have the greatest impact. Chapter 1 funds are currently allocated to some 90 percent of all LEAs in the United States. The National Assessment of Chapter 1 found that this diffusion of resources has had negative consequences. School districts with large concentrations of poor children receive funds sufficient to serve only a portion of their low-achieving students, while in wealthier districts, many higher-achieving students are served. Thus, even with substantial funding increases, a significant number of the neediest students would not receive Chapter 1 assistance given the present means for allocating resources.

Our Chapter 1 reauthorization bill addresses the targeting issue by:

1. Proposing two small, but important, changes to the current distribution formula for LEA grants in order to funnel more resources to school districts with the highest concentrations of poor children. Five percent of LEA grant funds would be allocated through the existing Concentration Grant formula. This would direct more funds to LEAs in counties with at least 5,000 poor children or in which poor children make up at least 20 percent of all children in the county--areas that have the greatest need. The remaining funds for LEA grants would be allocated based on the number of poor children in excess of two percent of the total number of poor children in a school district. This would also have the effect of redirecting funds to districts with more severe needs. These proposals would accomplish important shifts in resources without eliminating existing LEA grant recipients.

2. Improving the targeting of funds within school districts by establishing a general principle that Chapter 1 funds should be concentrated on the poorest one-third of a district's school attendance areas.

3. Clarifying that LEAs must select children most in need to receive Chapter 1 services. The current law permits LEAs merely to select some of the children most in need of assistance while also serving less needy children.

CHAPTER 1--FELTON DECISION

Question: Mr. Secretary, your proposed solution to the Felton decision would be to allow local school districts to provide vouchers to their students so that private school students could obtain compensatory education services in their schools. If the voucher proposal is not enacted, and it doesn't appear that it will be, would you support appropriations for a program to finance off-school services for private school students in need of compensatory education?

Answer: Although the approach that you suggest would provide some relief to many local school districts, it is a costly and incomplete solution to the problem. First, aside from questions of cost and practicality, it is undesirable on educational grounds. Forcing children to leave their regular school environment to receive special remedial services can be disruptive and cause a loss of educational time, and can strongly suggest to low-achieving children that they are somehow different and inferior. Second, mobile vans and other capital items absorb money that could be used for direct educational services for Chapter 1 children. Finally, taking children out of their schools for Chapter 1 services is impractical in many cases. There may not be an acceptable site for a mobile van or similar facility near the private school.

In addition, you should realize that the current law does not authorize specific programs to finance off-school services for private school students needing compensatory education. Any funds appropriated for this purpose would require special language authorizing such a program.

CHAPTER 1--STATE INCENTIVE GRANTS

Question: Mr. Secretary, some critics have argued that school reform in the States has ignored the need to provide disadvantaged students with the extra help they need to meet tougher graduation requirements. Since many States are in a better position than we are these days to provide additional educational services, why hasn't the Administration ever requested appropriations for the Chapter 1 incentive grant program which would leverage greater State efforts?

Answer: We have never requested funds for the Chapter 1 State Incentive Grant program because the current program structure does not provide a realistic incentive to the States to improve the quality of compensatory education services. Funds appropriated for this program are available only to States that already have in place at the time of the appropriation, compensatory education programs similar to Chapter 1. Qualifying States that would receive funds under the State Incentive Grant program in the first year would be guaranteed the same amount in each succeeding year so long as they maintained their previous year's expenditures for their own State-operated compensatory education programs. Thus, no incentive would exist for additional States to begin their own compensatory education programs, unless the appropriation for the program was increased. If the appropriation for the State Incentive Grant program was increased, but no new States became eligible, the States already participating would receive even more funds and the amount guaranteed to them in succeeding years would also increase. This would make it even more difficult for new States to participate in future years unless the appropriation increased.

To provide better program incentives we have proposed to reward success by requiring each State to use one percent of its LEA Grant funds for additional grants to reward excellence in Chapter 1. This provision, coupled with our proposal to increase program accountability and results by requiring SEAs to assess program effectiveness and to take necessary measures to correct deficiencies, would provide a much better incentive for States and localities to expand and improve their compensatory education programs.

OBLIGATION OF DRUG-FREE SCHOOLS FUNDS

Question: This morning I would like to get an update on the progress the Department is making in spending the 1987 funding. Mr. Secretary, as you know, for 1987, State and local programs were funded at a level of $161 million and the National programs were funded at a level of $33.5 million. To date -- 6 months after the funding was provided -- only $55 million of the State and local funds have been obligated and none of the Federal funds are obligated -- on an overall basis only 28% of the money is obligated.

None of the discretionary Federal activities money -- for example, over which you have complete control has been obligated.

Mr. Secretary, is the Department slowing down the spending rate on this drug education money?

Answer: Absolutely not. The Department has made extraordinary efforts to ensure that funds are awarded as soon as they prudently can be. Our goal is to have these funds at work in schools and communities at the beginning of the 1987-1988 school year. All of the advance work necessary to make awards for the Federal Activities Grants program has been done, and a notice inviting applications was published in the Federal Register on April 23. Applications are due June 24, 1987, and nearly 1,500 applications were mailed to potential applicants on May 11.

Furthermore, we believe that to have obligated nearly 28 percent of the funds--a percentage that increases daily as more States submit applications--only six months after the enactment of the legislation is not slow. It is much faster than the normal rate of obligation, especially for a new program. Had we not taken the extraordinary step of accepting applications and obligating funds on the basis of non-regulatory guidance rather than Federal regulations, obligations could have been delayed as much as six months beyond the date on which funds were actually made available.

DRUG-FREE SCHOOLS

Question: Mr. Secretary, the Federal activities portion of the Drug-Free Schools Act instructs you to coordinate efforts with Secretary Bowen at the Health and Human Services Administration to provide drug education and prevention services. We appropriated over $6.8 million for this purpose.

Would you please tell us what activities you are executing with Secretary Bowen and how often the two of you have commuicated on this matter?

Answer: Both HHS and ED are members of the newly formed Drug Policy Board, as they were of its predecessor organizations, the National Drug Enforcement Policy Board and the Domestic Council Working Group on Drug Policy. The National Drug Policy Board Coordinating Group on Drug Prevention and Health, a subgroup of the Drug Policy Board, has a subcommittee on Education on which both HHS and ED serve. This group formalizes the regular monthly meetings between ED and HHS which began in December of 1986. These meetings have covered a broad range of topics of mutual interest, including implementation of the Federal Activities program. For example, we have agreed to share information about grantees under our respective authorities, and HHS has agreed to provide the names of qualified individuals who could serve as reviewers of grant applications to the Federal Activities Grants program.

DRUG-FREE SCHOOLS DISCRETIONARY FUNDS

Question: How are you using the $6.3 million you received for discretionary activities and how much of these funds have been obligated to date?

Answer: Some $5 million of the funds for Federal Activities will be used for the Federal Activities Grants program, which is intended to demonstrate comprehensive local programs. Applications are due June 24, 1987, and awards will be made in time for the 1987-88 school year. Additional amounts will be awarded for the mandated study being conducted by the Department under a memorandum of understanding with HHS; a Drug-Free Schools Recognition program similar to the Secondary School Recognition program also operated by the Department; and the Network of Drug-Free Campuses, which will encourage communication among institutions of higher education fighting to get drugs off their campuses. While no funds have been obligated to date, we expect that nearly all will have been obligated by this fall.

SCIENCE AND MATHEMATICS EDUCATION

Question: With the widely shared interest in educational reform I was puzzled to see your proposal to eliminate the Math/Science program.

Mr. Secretary, we have recently been inundated with studies on the substandard performance of American school children in mathematics and hard science. If fact, new evidence ranks the mathematical ability of American primary and high school students "among the lowest of any industrialized country." I find it strange that your budget proposes to eliminate the Math/Science program in favor of a national teacher training initiative for almost all disciplines.

In view of the relative U.S. weakness in math and science, why are you proposing to eliminate the well targeted Math/Science program?

Answer: The Science and Mathematics Education program is designed to improve teaching in the Nation's schools, which we believe is a worthy objective. However, we also believe that the best means for achieving that purpose is a program of broad Federal support that can match the needs of individual States and communities.

The comprehensive and flexible structure of the proposed Christa McAuliffe Teacher Training and Improvement program would have a greater impact on teaching than the Science and Mathematics Education program because it would eliminate the burdensome requirements and funding set-asides, making teacher training available in all subject areas and enabling States to address their respective teacher training needs.

TEACHER AND NURSE SHORTAGE

Question: Mr. Secretary, as you know, demand for teachers has been rising but the supply has been shrinking: women and minority group members, the traditional groupings from which teachers emerged, now have wide opportunities in higher paying fields.

Nationwide a 360,000 shortage is projected between now and 1993. In Florida, we expect to graduate less than a third of all the teachers we need to add over the next 13 years. In science alone, we will need 11,500 more teachers but expect to produce only 1,000 more.

We clearly can't sustain educational reform without teachers. What is the Department doing about the teacher shortage problem?

Answer: There is a considerable amount of debate as to whether there is a teacher shortage problem. According to a report by Emily Feistritzer, most of the arguments used to build a case that there is a crisis in teaching are based on projections and speculation. Raw data indicate that the hiring of new teachers has kept pace with school enrollments and, in some areas, the supply of teachers has actually exceeded demand. In addition, the Bureau of Labor Statistics reports that reform measures, such as higher pay and higher status for teachers, in combination with normal market adjustments, should not only prevent shortages from materializing, but may even enable schools to be more selective in hiring. BLS concludes that, on the whole, no large-scale teacher shortages are likely. Finally, according to data provided by the Bureau of Labor Statistics, the Center for Education Statistics reports that the rate at which teachers leave their jobs is consistent with the rates at which other professional and technical workers leave theirs. Findings indicate that elementary and secondary teachers are not leaving teaching at a high rate when compared to other professional occupations requiring similar preparation for entry level-positions. CES concludes that transfers into teaching are no greater than transfers-out, for both elementary and secondary teachers.

The Department supports enactment of the Christa McAuliffe Teacher Training and Improvement bill. The new program would provide comprehensive Federal support for teacher training in a broad array of subject areas including math, science, computer training, foreign languages, social studies, and humanities. In addition, the new program would address the specific elementary/secondary teacher training needs of individual States and communities.

TEACHER AND NURSE SHORTAGE

Question: We also have a nursing shortage. Presently over 80 percent of the hospitals indicate that they are actively recruiting nurses and a number of institutions, such as Walter Reed and even NIH have closed units due to the lack of qualified staff. The most recent figures available indicate that since 1984 there has been a 33 percent decline in the number of college freshman who express a desire to become a nurse.

Like the teacher shortage, powerful demographic and social forces are working to create these shortages. Again, what can the Department do to help reverse this situation? Should we consider changes in the Student Financial Aid programs to encourage more people to select careers in nursing and teaching?

Answer: I do not believe that any change to the Student Financial Aid programs would be effective in reversing these trends. The trends we see in both teaching and nursing are part of the same historical transition. Both teaching and nursing have been professions in which women predominate. As such, they have typically been lower paid. As women have been accepted into other fields of endeavor, they have chosen to take advantage of these opportunities which has created a void. At the same time, men have been reluctant to enter these professions because of the low pay associated with them. The economy has been slow in recognizing these trends, and the current labor shortages are a direct result. No changes made to the Student Financial Aid programs can ever correct this problem. Instead, there has to be a fundamental shift in the amount of money persons in teaching and nursing are paid if we expect these problems to go away.

SHORTAGE OF NURSES/TERMINATION OF VOCATIONAL EDUCATION

Question: Judy White Harris, a vocational educator in Sarasota, Florida, was recently named Vocational Educator of the year. Ms. Harris is a nurse who trains nursing assistant students, many of whom are high school dropouts. She tells me that it costs between $50,000 and $100,000 to start up one new modern medical assistants program and that these necessary funds for modernization would normally come from the Federal program. This country will be facing a dangerous shortage of nurses and nursing assistants in the near future.

Doesn't the termination of the Federal funds send us in the opposite direction from where we should be going in this area?

Answer: Many States are quite actively working to develop new and innovative vocational education programs, including nursing and other health profession programs. The Department continues to encourage the States to evaluate the strengths and weaknesses of their vocational education programs in relationship to the needs of the market place. Certainly, with the growing need for nurses, the States will be encouraged to direct some of their resources toward the development of additional nurse training programs. Since State and local governments currently spend over $12 for every dollar spent by the Department for vocational education, the States clearly have resources available for such program development.

PROPOSAL TO ELIMINATE VOCATIONAL EDUCATION

Question: Mr. Secretary, we understand that your rationale in proposing the elimination of the Vocational Education program is that these needs will be met by the Department of Labor under a new and expanded program. Unfortunately, when we total all funding proposed by the Administration for training, we see a net reduction of more than $300 million for 1988.

Also, roughly 50 percent of Federal vocational education funds are limited to programs whose purpose is to assist special disadvantaged populations. While the Department has argued that the Federal dollar is only one in twelve for vocational education, our vocational programs addressing the handicapped, the disadvantaged and students with low English proficiency, the Federal share is often much higher, over one-third.

Additionally, the Department of Labor's job training program is for workers who have already lost their job. The primary beneficiaries of vocational education are tomorrow's workers.

Isn't it shortsighted to argue that we must terminate the Federal effort for tomorrow's workers in order to train displaced workers, particularly in view of the fact that vocational education programs help reduce the dropout rate?

Answer: While vocational education may seem to prevent students from dropping out, only one study supports this belief. The study, conducted by the National Center for Research in Vocational Education (NCRVE), entitled "The Role of Vocational Education in Decreasing the Dropout Rate" (Weber, 1986), suggests that vocational education might serve in concert with other factors to help dropout-prone students complete their high school education. Other studies cannot confirm any correlation between vocational education and high school retention. An analysis using High School and Beyond data for the Center for Statistics, entitled "Who Drops Out of High School? Findings from High School and Beyond" (Barro and Kilstad, 1987), found no relationship between vocational education and high school retention when other factors were controlled.

Additionally, the Job Training Partnership Act program administered by the Department of Labor provides services to disadvantaged persons who have not yet entered the labor force, not just displaced workers. In many cases this population is substantially the same as the special populations served through the Perkins Act set-aside.

The decision to terminate funding for vocational education was quite difficult, and was not a choice we would have made, given other circumstances. However, with our limited resources we felt it was more important to protect programs which provide basic educational opportunities to disadvantaged students, those students who are ultimately most prone to dropping out.

IMMIGRANT AND REFUGEE EDUCATION

Question: A report from the Census Bureau shows that, with the exception of Cuban immigrants, our recent immigrants from Latin America have arrived with less schooling than those that arrived in earlier years. These recent immigrants are in greater need of education and training services than their predecessors.

Mr. Secretary, since many of these immigrants and refugees have arrived here as a result of Federal policies, why is the Administration asking us to terminate all funding for Immigrant Education, terminate all funding for Refugee Education, and terminate funding for Bilingual Vocational Education?

Answer: No funds were requested for the Immigrant and Refugee Education programs, because these programs constitute general aid to education and do not necessarily result in special services being provided to eligible students. During a period when Federal spending must be curtailed, we believe that available resources are better invested in programs such as Chapter 1 and Bilingual Education that are designed to provide specific educational services.

In the case of Bilingual Vocational Training, no funds were requested because substantial funding is provided to serve the same population under other programs. For example, services were provided to more than 500,000 limited English proficient persons under the Adult Education Act.

Question: Has the Administration taken a comprehensive look at the education and training needs of our immigrant populations.

Answer: No recent studies have been conducted specifically on the education and training needs of the immigrant population. However, using funds appropriated under the Bilingual Education Act, the Department has conducted extensive research in the area of the educational needs of limited English proficient persons, many of whom are recent immigrants. Furthermore, for fiscal year 1988, the Department has requested $2 million for Adult Education Research, Development, and Evaluation under the Adult Education Act. If these funds are appropriated, the Department will begin an assessment of the size and characteristics of the adult illiterate population. Recent immigrants constitute a significant portion of this group. An evaluation of the effectiveness of Department of Education programs in addressing this problem will also be initiated.

IMMIGRANT POPULATIONS/LITERACY

Question: Although some services are provided for these children under other Federal programs, such as Bilingual Education, the Emergency Immigrant Education funds are the only monies available to provide necessary special services such as: Native language instruction (for those students not able to receive any instruction in English); one-on-one tutoring; cultural adjustment seminars (most needed by Asian, Haitian, and Vietnamese immigrants); and special summer sessions.

Mr. Secretary, the new immigration law will make between 3 million and 6 million undocumented aliens eligible for citizenship. The new law requires, however, that they learn English before they can be naturalized. Although you are requesting a $20 million increase for adult education grants, you are simultaneously requesting that we terminate $5 million in funding for the library literacy initiative.

Will this $15 million net increase for literacy even begin to make a dent in the literacy needs of our new citizens or the millions of current citizens that are functionally illiterate?

Answer: In addition to the requested increase in Adult Education funds that you mention, the Immigration Reform and Control Act of 1986 appropriates $1 billion per year beginning in 1988 for State grants to be used for programs of public assistance, programs of public health assistance, and education to assist eligible legalized aliens. Ten percent of these funds are to be used for programs designed to enable eligible legalized aliens to attain citizenship skills.

Federal-level administration is provided by the Department of Health and Human Services. Adult education officials in the Department of Education will encourage State program directors to work with their counterparts in HHS-funded programs in an effort to obtain support for English as a second language and citizenship education programs for adult aliens, and thus to maximize the services provided to these limited English proficient adults.

LIBRARY LITERACY PROGRAMS

Question: Should we assume from your request that the Department does not believe that libraries have a role to play in improving literacy skills?

Answer: The job of combating illiteracy must be untertaken on a broad front, including literacy programs conducted in the local public libraries. However, we do not feel that continued Federal support of Library Literacy Programs is required since the number of library literacy projects reported by the States more than doubled between 1980 and 1984 without the aid of this program.

OBLIGATION LEAD FUNDS

Question: Mr. Secretary, I understand that funds appropriated for the Leadership in Educational Administration program for fiscal year 1986 have still not been obligated. Why is your Department dragging its heels in distributing these funds?

Answer: The 1986 appropriation initiating the LEAD program became available for obligation on July 1, 1986 and remains available through September 30, 1987. The regulations governing this new program will become effective on May 8, 1987. All awards will be ready for announcement on that date, with one exception: the State of Indiana did not have a fundable applicant. Potential applicants are being given another opportunity to submit applications so that the State of Indiana may receive equal benefits from the LEAD program in the first year.

Question: When will the funds that we also appropriated for fiscal year 1987 be obligated?

Answer: Our present schedule calls for the 1987 funds to be awarded in May 1988 to continue the LEAD projects.

SECRETARY'S DISCRETIONARY FUND

Question: Your budget materials indicate that the Administration will be forwarding a proposal to give you greater flexibility in spending the Secretary's Discretionary Fund. What currently funded activities would you not anticipate supporting if your proposal is enacted? What non-mandated initiatives will be funded in 1987 and what initiatives do you anticipate for 1988?

Answer: We do not plan to eliminate any of the programs currently mandated unless they are replaced by other legislation, such as the regional centers previously funded under the set-aside

for the Alcohol and Drug Abuse Education program which are now funded under the Drug-Free Schools and Communities Act. Our intent is not to eliminate programs but to permit the movement of funds between mandated programs and between those programs and actual discretionary programs developed in accordance with priorities and initiatives. This flexibility will allow us to operate the currently mandated programs more effectively, and make it possible to respond to qualify applications and to undertake longer term initiatives with the portion of the program not presently mandated.

The amount available in 1987 for activities that are not mandated is so little that it is not practical to estabish priorities and conduct a grant competition. Instead, we plan to fund a few activities directly, such as the Presidential Scholars program, which recognizes 141 outstanding graduating high school seniors, and the publication of the latest of the What Works series on the education of disadvantaged youth. We have also received a number of unsolicited applications, which are being considered for funding. Priorities for 1988 have not yet been established, but possibilities include demonstrations of dropout prevention programs, and programs for high ability youth in schools in poor areas.

Question: Why do you propose the elimination of the minimum funding levels for the mandated programs under the Secretary's Discretionary Fund?

Answer: We propose to eliminate the minimum funding levels for the mandated programs to allow the movement of funds both between programs presently mandated, and between those programs and the small amount over which the Secretary truly has discretion, depending on the quality and importance of applications received each year and any priorities that have been established. Sometimes we receive more good applications than we can fund under a particular program, and sometimes we have too few good ones for a given program or competition.

Question: If you cannot determine the FY 1988 funding levels needed for these programs in conjunction with the FY 1988 budget request, when do you think you might be able to make this determination?

Answer: The fiscal year 1988 funding levels needed for these programs will be determined after the priorities for fiscal year 1988 have been established. The priorities for fiscal year 1988 are currently under consideration.

INEXPENSIVE BOOK DISTRIBUTION

Question: What modifications of the Inexpensive Book Distribution program, funded under the Secretary's Discretionary Fund, would be necessary to make it an effective program for promoting adult literacy?

Answer: The purpose of the Inexpensive Book Distribution program is to motivate children to learn to read and to support and promote the establishment of reading motivation programs that

include the distribution of inexpensive books to students. The authorizing legislation, which restricts participation to pre-elementary, elementary or secondary school children, would have to be amended to provide for a program to promote adult literacy.

LAW-RELATED EDUCATION

Question: Why is the Law-Related Education program, funded under the Secretary's Discretionary Fund, being used to promote the interests of the Secretary related to the bicentennial of the U.S. Constitution?

Answer: In 1987 the Congress increased funding for the Law-Related Education program from $2,000,000 to $3,000,000. The Conference report on H.R. 5233, which was later incorporated into the continuing resolution which provides funding for the Department's programs for 1987, expressed the clear intent that the increase in funding be used for activities related to the bicentennial of the U.S. Constitution. I wouldn't say that these funds are promoting my interests, but rather that they are promoting the Nation's interests in learning more about this most important document.

Question: Why are these funds being used for "projects that improve students' character" through respect for the law?

Answer: Some Law-Related Education funds are being used for "projects that improve students' character" through respect for the law" because character is the basis for sound judgment and an essential aspect of educational excellence.

EDUCATION ASSISTANCE FOR THE HANDICAPPED

Question: You have submitted to the Congress a budget that you describe as being pared down to the essentials, but which preserves Federal aid for those students and institutions in true need of assistance. In particular, your budget justifcations for the Education for the Handicapped and Rehabilitation Services programs assert your Department's continued commitment to serving the physically and mentally disabled.

Given this assertion, I might expect to see a 1988 request with a modest increase or at least current services funding for these programs. But once I get past the rhetoric and look at the actual numbers, I find -- not an increase, not current services, not even a freeze -- but an overall 10 1/2 percent cut from the 1987 appropriated level. Your commitment to the handicapped rings pretty hollow, Mr. Secretary, in the face of this evidence.

Don't you think these programs deserve at least an inflation increase so that States can maintain current levels of service for these vulnerable populations?

Background
(dollars in thousands)

	FY 87 Appropriation	FY 87 Revised Request	FY 88 Budget Request
Education for the Handicapped	$1,741,900	$1,453,241	$1,488,181
(Grants to States)	(1,338,000)	(1,216,793)	(1,259,381)
Rehabilitation Services (Vocational Rehabilitation State Grants)	1,484,758 (1,281,000)	1,357,303 (1,184,322)	1,401,123 (1,228,142)
Total	3,226,658	2,810,544	2,889,304

Answer: Our 1988 budget requests for the Education for the Handicapped and the Rehabilitation Services programs are based on our 1987 revised requests, not upon the 1987 appropriation. For 1988, we requested increases of $35 million for Education for the Handicapped and $44 million for Rehabilitation Services, or a total increase of $79 million above our 1987 revised requests for these programs. Our 1988 request included combined increases of $86.4 million to offset the effect of inflation for Grants to States under the EHA and Vocational Rehabilitation State Grants.

FUNDING FOR EDUCATIONAL STATISTICS

Question: Mr. Secretary, you have consistently argued that one of the Federal Government's appropriate roles in education is to collect and disseminate nationwide data on educational attainment and practices. In fact, it's one of the few areas for which your budget requests an increase. Given the significant cuts elsewhere, I'd say that's a good indication of the high priority you give it.

A study group you appointed recently recommended substantial and costly changes to the National Assessment of Educational Progress -- the biennial survey of the achievement of elementary and high school students. You were quoted in the New York Times as saying that you "certainly intend to move forward with legislation and to seek authorization to put an improved report card into the Nation's hands."

Since you have committed to proposing legislation that would make the recommended changes to the survey, when can we expect to see a budget amendment from the Department that would finance the cost of these changes?

Answer: Our budget request for 1988 already includes $1 million for planning in response to the recommendations made by the study group on national assessment. No additional funds will be required for this purpose in 1988. Our budget request for 1989 will include the funds needed for the Department to implement an improved National Assessment of Educational Progress beginning with the 1990 assessment cycle.

STUDENT FINANCIAL AID

GAO STUDY--STUDENT DEBT BURDEN

Question: Mr. Secretary, we are familiar with your several student financial aid proposals which have the net effect of reducing student financial aid by $3.7 billion dollars by putting more reliance on market rate loans and greatly reducing grants. By your own budget figures this would reduce student awards by 3,019,000 and the new number of students aided would be reduced by 861,000. I noticed in your statement that you indicated that your proposals would make the repayment burden "more manageable".

That assertion is in direct conflict with the results of a GAO study that I am releasing this morning.

GAO went to the University of Miami, the University of Florida, Miami-Dade Junior College and Bethune Cookman. At each school, GAO selected real student cases from three different income categories: a low-income category of $10,000 to $15,000, a middle-income category of $25,000 to $30,000 and a high-income category of $40,000 to $45,000. They rejected student examples that were at the extremes.

The results of this GAO review are illustrated on the charts that are behind me. The situation for students from low-income families is particularly dramatic:

- One student from Bethune Cookman would have his loan as a percentage of total aid jump from 32 to 73 percent and would have his repayment requirements at graduation jump from $12,700 to $30,300.

- Another student from a low-income family attending the University of Miami would have his loan repayments at the time of graduation jump from $24,000 to $53,000.

As if that weren't bad enough, each of these students would pay back even more, the lower their income was after graduation. For example, our student from a low-income family at the University of Miami would pay back $53,000 on a $31,000 loan package if he graduated and became an engineer. If that same person graduated and became a social worker and earned a much lower income, he would pay back $61,000 on the same loan package of $31,000.

Mr. Secretary, for each type of institution--a private school with high tuition, a public school with a moderate tuition, a historically black college with a moderate tuition and a junior college also with a moderate tuition--the results are the same. Students graduate with more debt that has higher monthly payments over the repayment period. In other words the debt is more burdensome and less manageable. And the program is regressive. In other words, the less you make after graduation, the more you pay.

Mr. Secretary, how can you with a straight face argue that your proposal for student financial aid results in a "more manageable" debt?

Answer: First, I must object to your statement that our proposals would have the net effect of reducing student aid by $3.7 billion. Our proposals would reduce costs to the Federal Government by that amount, not aid to students. The GAO study makes a similar mistake in suggesting that Federal aid amounts would be reduced. In fact, our proposals would substantially expand Federal aid eligibility by increasing Income Contingent Loan capital and limits and by eliminating all limits on borrowing under the federally guaranteed PLUS and Supplemental Loans to Students programs. (The GAO study ignores these programs.) In these loan programs, the Federal interest subsidization would be reduced, not eligibility for aid, under our proposals.

Second, it is not a surprise and should not be disturbing that a borrower who earns a relatively low income throughout his or her career would, under the ICL program, repay much more in total than the higher earner--but over a much longer time period and in much smaller, more manageable, installments. Anyone who takes out a 30-year instead of a 15-year mortgage understands that he or she will be paying more in total for the opportunity to repay in smaller installments. That does not mean that the person is acting irrationally; rather, that he is committing quite reasonably to a monthly payment that he can afford.

Third, I don't believe GAO aid package comparisons give a completely fair comparison regarding debt "manageability". Of course, a gift which does not have to be repaid is more "manageable" than a loan which requires repayment. And a highly subsidized loan will, in many cases, be more "manageable" than a non-subsidized loan. If you compare the current, highly subsidized, loan programs which produce a debt which must be repaid under a short-term, fixed-payment basis to the Income Contingent Loan program, which bases repayment on the student's ability to repay (his income), then I believe we could agree that, especially in cases of sizable total debt, the ICL program results in "more manageable" debt. Certainly, if you compare ICLs to other non-interest subsidized loans such as Supplemental Loans to Students and PLUS loans, the ICL provides a great reduction in yearly repayment burden.

STUDENT DEBT BURDEN--YOUNG FAMILIES

Question: Mr. Secretary, statistics show that families in the 25 to 34 year-old age bracket are already our most indebted class of citizens. These are the years when young families are paying back their student loans and simultaneously borrowing to pay for a first home or a first car. Are you at all concerned about the impact these much greater debt burdens will have on these families, or the ability of these families to pay for anything other than their student loans?

Answer: We are very concerned about the impact of student loan debt burden on young families. That is one of the primary reasons that we proposed an income contingent loan program in 1986. This kind of program makes it easier for young families to meet

their loan repayment obligations yet retain resources to pay other obligations young families assume. This program, at the same time, reduces the level of Federal subsidy. Without such a program, many borrowers starting out would be faced with the traditional fixed payment plan which imposes high payments immediately after the grace period following graduation.

FEDERAL ROLE IN STUDENT AID

Question: What kind of message do you believe your budget proposal sends to the high school students across the country who are thinking about going to college?

Answer: I think the message our budget proposal sends to students thinking about going to college is that the financial means to achieve access to postsecondary education is available to them, but that they themselves have a major responsibility in financing their education. Equally importantly, I believe it signals to the very poorest students that this Administration cares deeply about their ability to go to school, since the budget proposes putting all grant aid in the most targeted program (Pell Grants) and seeks a hugh funding increase for the need-tested new Income-Contingent Loan program. The Federal Government's role is to supplement parent, student, State, and private efforts to ensure access and educational choice for the nation's neediest students to post-secondary education. Our fiscal year 1988 budget restores the proper Federal role in the financing of postsecondary education, particularly for needy students, by increasing the availability of loan capital, by making loan repayments more manageable, and by limiting Federal grant aid to the neediest students.

TUITION INCREASES SINCE 1970

Question: A lot of attention has been focused on college tuition increases. A lot of attention has also been focused on your explanation of why they have increased. Essentially, Mr. Secretary you have been quoted as saying that college tuitions have increased primarily because Federal student aid cushions the blow of higher costs to students.

Does that correctly sum up your views?

Answer: Yes, that fairly sums up our views on the increases in the tuition and fees charged by colleges and universities. It is not that college prices and student aid appropriations have a direct and proportionate cause and effect relationship--more dollars for student aid, higher prices. It means that student aid dollars act as a major subsidy to higher education which insulates these institutions from the normal market forces of supply and demand. The availability of student aid reduces the incentives for colleges to hold down costs. It is hard to believe that a Federal subsidy of $15 billion to higher education has no effect on prices.

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PELL GRANT PROGRAM--COST ESTIMATES

Question: The Administration cost estimates for the 1986 Pell Grant program as currently authorized are dramatically higher than the estimates of the Congressional Budget Office. Please supply for the record a detailed analysis of your cost estimates for the 1988 program as currently authorized at a variety of maximum grant levels.

Answer: Attached are tables summarizing the projected costs of the Pell Grant program for the 1988-89 award year (fiscal year 1988) as authorized by the Higher Education Amendments of 1986 (Public Law 99-498) using maximum grant levels of $2,100, $2,300, and $2,500.

PELL GRANT PROGRAM

COST PROJECTION USING FIXED PARTICIPATION RATES
OFFICIAL CALIBRATION/UPDATE 88
FOR ACADEMIC YEAR 1988-89

$2,100 MAXIMUM AWARD

Annual Adjusted Income	Percent of Participation	Recipient Population	Percent of Total	Average Award	Program Cost	Percent of Total
-99999 to $ 0	73.72	197,029	6.27	$1,553	$306,016,216	7.19
$1 to $ 4,000	73.77	617,986	19.66	1,583	978,648,249	23.00
$4,001 to $ 7,500	75.58	677,626	21.56	1,536	1,041,443,229	24.47
$7,501 to $ 10,000	77.22	319,571	10.17	1,385	442,821,212	10.40
$10,001 to $ 12,000	79.44	178,487	5.68	1,439	256,845,436	6.03
$12,001 to $ 15,000	80.26	238,433	7.58	1,383	329,948,676	7.75
$15,001 to $ 20,000	80.34	314,268	10.00	1,220	383,567,049	9.01
$20,001 to $ 25,000	80.31	234,118	7.45	1,003	235,043,188	5.52
$25,001 to $ 30,000	79.73	169,467	5.39	843	142,924,324	3.35
$30,001 to $999,999	80.71	195,205	6.21	704	137,473,186	3.23
TOTAL	77.12	3,142,194	100.00	1,354	4,254,730,768	100.00

67,000--External Adjustments

251,100,000--External Adjustments
16,045,970--Administrative Allowance

TOTAL 3,209,194--Total Recipients 4,521,876,738--Total Program Cost

PELL GRANT PROGRAM

COST PROJECTION USING FIXED PARTICIPATION RATES
OFFICIAL CALIBRATION/UPDATE 88
FOR ACADEMIC YEAR 1988-89

$2,300 MAXIMUM AWARD

Annual Adjusted Income	Percent of Participation	Recipient Population	Percent of Total	Average Award	Program Cost	Percent of Total
-99999 to $ 0	73.72	199,011	6.15	$1,668	$331,970,304	7.02
$1 to $ 4,000	73.78	618,232	19.11	1,714	1,059,660,071	22.43
$4,001 to $ 7,500	75.58	678,338	20.96	1,668	1,131,860,230	23.96
$7,501 to $ 10,000	77.17	327,209	10.11	1,492	488,493,021	10.34
$10,001 to $ 12,000	79.43	181,117	5.59	1,556	281,832,561	5.96
$12,001 to $ 15,000	80.26	241,910	7.47	1,507	364,786,013	7.72
$15,001 to $ 20,000	80.39	320,537	9.90	1,350	432,784,094	9.16
$20,001 to $ 25,000	80.42	243,251	7.51	1,129	274,851,812	5.81
$25,001 to $ 30,000	79.74	189,738	5.86	928	176,118,031	3.72
$30,001 to $999,999	80.59	235,522	7.28	768	180,971,763	3.83
TOTAL	77.20	3,234,869	100.00	1,460	4,723,327,904	100.00
		67,000--External Adjustments			251,100,000--External Adjustments	
					16,509,345--Administrative Allowance	
TOTAL		3,301,869--Total Recipients			4,990,937,249--Total Program Cost	

PELL GRANT PROGRAM

COST PROJECTION USING FIXED PARTICIPATION RATES
OFFICIAL CALIBRATION/UPDATE 88
FOR ACADEMIC YEAR 1988-89

$2,500 MAXIMUM AWARD

Annual Adjusted Income	Percent of Participation	Recipient Population	Percent of Total	Average Award	Program Cost	Percent of Total
-99999 to $ 0	73.72	199,265	6.01	$1,790	$356,844,682	6.86
$1 to $ 4,000	73.78	618,519	18.65	1,840	1,138,494,870	21.91
$4,001 to $ 7,500	75.59	679,224	20.48	1,796	1,220,017,628	23.48
$7,501 to $ 10,000	77.14	334,089	10.07	1,598	534,176,799	10.28
$10,001 to $ 12,000	79.40	183,566	5.53	1,669	306,474,808	5.90
$12,001 to $ 15,000	80.26	244,939	7.38	1,629	399,209,672	7.68
$15,001 to $ 20,000	80.42	326,262	9.84	1,477	482,082,272	9.28
$20,001 to $ 25,000	80.50	249,695	7.53	1,262	315,118,194	6.06
$25,001 to $ 30,000	79.79	204,579	6.17	1,031	210,991,704	4.06
$30,001 to $999,999	80.52	275,153	8.29	839	231,057,212	4.44
TOTAL	77.27	3,315,296	100.00	1,566	5,194,467,846	100.00
		67,000--External Adjustments			251,100,000--External Adjustments	
					16,911,480--Administrative Allowance	
TOTAL		3,382,296--Total Recipients			5,462,479,326--Total Program Cost	

PELL GRANT PROGRAM--COST ESTIMATES

Question: Please indicate the dollar impact you attribute to each of the major program changes enacted through the Higher Education Amendments of 1986.

Answer: The following table lists the estimated costs of each of the major changes to the Pell Grant program contained in the Higher Education Amendments of 1986 (Public Law 99-498), as compared to the law in effect before the 1986 amendments.

Increased Cost Effect of HEA Amendment Changes
Based on a Maximum Grant of $2,500
(Dollars in Millions)

Increase maximum grant to $2,500	$747
Offset for State/local taxes	343
Independent student definition	140
Institutional waiver authority	155

PELL GRANTS--MAXIMUM AWARD

Question: As you know the Higher Education Amendments of 1986 (Public Law 99-498) authorized an increase of the Pell Grant maximum award from the current $2,100 to $2,500 in 1988. Why is the budget estimate based on the Pell Grant maximum of $2,100?

Answer: Although the Higher Education Amendments of 1986 authorize a $2,300 maximum award in 1987 and a $2,500 maximum award in 1988, the 1987 appropriation continued the $2,100 maximum award level from the previous year. A $2,100 maximum award level in 1988 would thus maintain current policy and would provide a sufficient grant level to promote access to postsecondary education for low-income students. Raising the maximum award from $2,100 to $2,500, as contained in the Higher Education Amendments of 1986, would increase the cost of the program by almost three-quarters of a billion dollars, as compared to the law in effect before the 1986 amendments. Such an increase is clearly inappropriate and unaffordable in the current deficit situation.

Question: Do you have any cost estimates showing how the increase from a $2,100 maximum award to $2,500 maximum Pell Grant award would impact on the cost of the program?

Answer: The Department estimates that for fiscal year 1988 Pell Grant program costs under the newly amended law would total approximately $4.4 billion using a $2,100 maximum award, and $5.5 billion using the authorized $2,500 maximum. This approximately $1 billion program cost increase results from interaction of the increased maximum with other policy changes contained in the 1986 amendments (e.g., independent student definition, living allowance increases, and various need analysis liberalizations).

PELL GRANTS--NEED ANALYSIS SYSTEM

Question: The fiscal year 1988 budget documents indicate that Pell Grant program costs would be reduced through a tighter and more consistent need analysis. Is the proposed streamlining of the need analysis system the same as that proposed in previous years?

Answer: The legislative changes proposed for the Pell Grant need analysis are very similar to proposals of prior years. These changes would apply need analysis consistently by requiring that all awards take into account the "expected family contribution". They would increase expected parental and student contributions through higher assessment rates on discretionary income, increase assessment rates on assets, and eliminate unverifiable and inequitable data elements such as unusual medical and dental expenses, unreimbursed elementary and secondary school tuition, and employment expenses.

Question: How would it change the new need analysis for students authorized in the Higher Education Amendments of 1986?

Answer: The need analysis system proposed for the Pell Grant program would help restore the traditional role of the student and the student's family in meeting postsecondary costs by increasing assessment rates for parental income and the income of independent students, and increasing assessment of the more readily available assets. Furthermore, in order to make the delivery of Pell Grant assistance more efficient and more equitable across the student population, we would propose eliminating unverifiable or inequitable data elements. This would include eliminating such items as unusual medical and dental expenses, unreimbursed elementary and secondary school tuition, and employment expenses. In addition, we would eliminate the new provision allowing institutions to override the statutory need analysis rules. For a quasi-entitlement program, such a provision is a clear and open invitation to abuse and unnecessary costs. In addition, a recent study conducted for the Department indicated that the elimination of data elements from the Pell Grant need analysis computation did not result in a significant shift in the distribution of Pell Grant aid.

PELL GRANT PROGRAM BUDGET REQUEST

Question: The fiscal year 1988 budget request proposes to reduce funding for the Pell Grant program to $2.710 billion, a decrease of 30 percent from the fiscal year 1987 budget authority of $3.9 billion. What is your rationale for reducing Pell Grants, the major source of grants to help low-income students finance their postsecondary education?

Answer: The Department's 1988 budget request is designed to improve the targeting of the program and (1) maintain the current maximum Pell Grant award ($2,100) available to the neediest students (roughly those with family incomes at or below the poverty line) and (2) distribute a larger percentage of available funds to students from families with incomes below $15,000. The Department's proposals to restore family responsibility for financing education and to eliminate program abuse and inequities

that currently exist in the program will reduce program costs to the $2.71 billion funding level. These proposals include: requiring parents and students to contribute a higher percentage of their income to finance education; making it harder for students to declare themselves self-sufficient inappropriately by tightening the independent student definition; eliminating unnecessary deductions for medical/dental expenses, elementary and secondary education expenses, and expenses related to employment; and requiring all students to obtain a high school diploma or its equivalent by the end of the first year of enrollment in order to continue to receive any Federal student assistance.

Question: How many students would be eliminated from the program and how many students would receive reduced awards under your proposal?

Answer: Under the Department's fiscal year 1988 budget proposal, we estimate that approximately 1,923,000 students would receive awards averaging $1,410 compared to 2,933,000 students with awards averaging $1,312 during fiscal year 1987 assuming full funding. Thus, the number of students receiving awards would be reduced by 1,010,000. Because parents and students would be expected to contribute more toward financing postsecondary education, students from family income levels greater than $20,000 would receive lower awards when compared to fiscal year 1987. We estimate that approximately 346,000 students would receive lower awards compared to fiscal year 1987.

LONG-TERM FLEXIBLE LOANS AND TARGETED PELL GRANTS

Question: In recent years there has been a growing imbalance between grant and loan aid. When one of the major national concerns is the dependence on loans and growing debt burden on students (particularly low-income students), what is your rationale for reducing Pell Grants, the one remaining source of grant aid in your proposals?

Answer: The Department disagrees categorically with any claim of an "imbalance" between grant and loan aid. The student is the primary beneficiary of a postsecondary education and he or she should assume a greater responsibility for that benefit by agreeing to finance the expanding educational costs through loans rather than grants. Recent shifts to a greater reliance on loan aid are appropriate and long overdue, particularly for higher income students.

The Department is sensitive to possible problems of higher levels of student loan indebtedness and has requested an appropriation of $600 million for the Income-Contingent Loan (ICL) program--an increase of $595 million over the previous year. An expanded ICL program would assist students and parents to bear a more appropriate share of the educational costs by making student loan repayment burden manageable, flexible, and as long-term as needed to accommodate individual post-school income circumstances.

The Department's 1988 budget request for Pell Grants would maintain the current maximum award for the neediest students, and distribute a larger percentage of the available funds to students from families with incomes below $15,000.

PURCHASING POWER OF A PELL GRANT

Question: Given the escalating costs of college, what is the "purchasing power" of the Pell Grant today compared to the Pell Grant in 1972 when the program first began?

Answer: The Pell Grant (Basic Educational Opportunity Grant) program first awarded aid to students in the 1973-74 award year. In that year, eligibility was restricted to freshmen enrolled on a full-time basis. The Basic Grant was not available to all undergraduate students until the 1976-77 academic year. In order to provide a more useful and appropriate basis of comparison, we have also provided data showing the "purchasing power" of a Basic Grant in 1976-77 to that of a Pell Grant in 1986-87, using 1986 dollars:

Aid Per Basic (Pell) Grant Recipient
Current versus Constant (1986) Dollars

	1973-74	1976-77	1986-87
Maximum Grant			
Current $	$452	$1,400	$2,100
Constant $	1,107	2,729	2.100
Average Grant			
Current $	270	745	1,324
Constant $	661	1,452	1,324

PURCHASING POWER BY INSTITUTION TYPE

Question: What percentage of the average cost of college does the Pell Grant now pay? Please provide this information for two-year and four-year public and private institutions.

Answer: The following table presents the average Pell Grant and average cost of attendance by type and control of institution for the 1984-85 award year (the latest year for which actual data are available):

Average Pell Grant and Cost of Attendance
by Type and Control of Institution, 1984-85

Type[1/] and Control of Institution	Average Pell Grant	Average Cost of Attendance [2/]	Ratio of Grant to Cost
Four-Year Public	$1,167	$3,360	.347
Four-Year Private	1,301	6,335	.205
Two-Year Public	846	2,544	.333
Two-Year Private	1,188	4,673	.254
Proprietary	1,199	4,778	.251

Source: "1984-85 Pell Grant End of Year Report", Office of Student Financial Assistance, U.S. Department of Education.

1/ The Pell Grant program categorizes an institution by one of the following: five years or more, four years--no graduate, three years but less than four years, two years but less than three years, one year but less than two years, six months but less than one year, and other.

In order to approximate four-year/two-year categories as requested, the first three categories were combined to represent four-year institutions, with weighted average grants and costs subsequently calculated, and the remaining four categories were combined to represent two-year institutions.

2/ This is based on the cost of attendance calculated for Pell Grant purposes as required by law. The Pell Grant cost of attendance is generally lower than the budgets that institutions would construct for other types of student aid.

PELL GRANTS--ASSESSMENT RATES

Question: Are the proposed assessment rates on income for the Pell Grant need analysis in the 1988 budget request the same as those that were previously proposed as part of the "self-help" initiatives in the 1985 and 1986 budget requests?

Answer: The proposed assessment rates on the discretionary income of the parents of a dependent student are similar to the assessment rates proposed as part of the Department's 1985 and 1986 budget requests. Under the fiscal year 1988 budget request, parents of a dependent student would be expected to contribute 20 percent of the first $5,000 of their discretionary income, with 30 and 40 percent of subsequent $5,000 increments. The assessment rates proposed as part of the fiscal year 1985 and fiscal year 1986 budget requests expected parents to contribute 18 percent of the first $5,000 of their discretionary income, with 20, 25 and 30 percent of subsequent $5,000 increments.

PELL GRANTS--ELIGIBILITY

Question: At what income level would a dependent student from a family of four lose eligibility?

Answer: Under the Department's fiscal year 1988 budget request for the Pell Grant program, the maximum income eligibility level for a typical family of four is estimated at $20,000 compared to $28,900 for fiscal year 1987. Any deviation from the assumptions made for a typical family of four would result in increases or decreases in program eligibility.

Question: You propose eliminating "ability to benefit" students from eligibility for the Pell Grant program. How many Pell Grant recipients are currently "ability to benefit" students?

Answer: The Department does not propose to eliminate "ability to benefit" students from eligibility. Students who are admitted to a postsecondary program on this basis would be required to obtain a high school diploma or a G.E.D. by the end of the first year of postsecondary study or before completing the academic program, whichever comes first.

The Department does not collect information on the number of Pell Grant recipients admitted on the basis of having a demonstrated "ability to benefit" from their training or education. The General

Accounting Office (GAO) evaluated the administration of the Pell Grant program by proprietary schools and found that a large number of students admitted on the basis of "ability to benefit" dropped out or were terminated before completing their training. Students with a high school diploma or a general education development certificate (GED) who were admitted to the same training programs were more likely to complete their training.

Question: Do you have the same opinion about allowing less than half time students to participate in the Pell Grant program?

Answer: The Higher Education Amendments of 1986 (Public Law 99-498) expands eligibility for Pell Grant assistance to students enrolled on less than a half-time basis beginning with the 1989-90 award year. Given the need to reduce the Federal deficit, the growth in Federal funding for the Pell Grant program, and the increases in Pell Grant costs as a result of other legislative changes authorized by the Higher Education Amendments of 1986, the Department cannot support expanding eligibility for Pell Grant assistance to less than half time students.

Needy students enrolled on at least a half-time basis should be the priority for receipt of Pell Grant assistance. Any funding for less than half-time students should be provided, as it has been, through other sources of Federal and non-Federal funding.

Additionally, less than half-time students are students pursuing an advanced education one course at a time, usually while working, implying up to 20 years to complete a four-year degree program. These students are not the needy students and do not need Federal support to assure that they attend school. Frequently, these are not degree-seeking candidates; they are often taking courses to improve job skills.

PELL GRANTS AWARD AND RECIPIENT DATA--1987-1988

Question: Please provide this committee with the following information for academic year 1986-87 and how this would compare to academic year 1987-88 if your budget request were enacted.

(a) The number of Pell Grants awarded to families with annual adjusted gross incomes below $15,000; between $15,000 and $20,000; and above $20,000.

Answer: The following information compares Pell Grant awards between the 1986-87 and 1987-88 award years assuming full funding for 1987-88, as requested by the Department in its proposal of a $287 million 1987 supplemental.

	Recipients	
Income	1986-87	1987-88
$0-$15,000	2,137,000	2,251,000
$15,001-$20,000	259,000	313,000
$20,001 +	223,000	369,000
Total	2,619,000	2,933,000

PELL GRANTS AWARD AND RECIPIENT DATA--1987-1988

Question: (b) The number of Pell Grant recipients by sex and race.

Answer: The only data currently available are provided by the Cooperative Institutional Research Program, which collects data by sex and race for first-time, full-time dependent freshmen. These data are compiled in a manner to indicate only the percentage of a given group that received Pell Grants, and not the percentage (and thus number) of Pell Grants that went to that group:

Participation Rates in the Fall, 1984

Percentage of males who received a Pell Grant	20.1%
Percentage of females who received a Pell Grant	22.7%
Percentage of Blacks who received a Pell Grant	44.2%
Percentage of non-Blacks who received a Pell Grant	19.1%

The Department is currently undertaking a major survey of aid recipients nationwide which will provide more comprehensive data by sex and race. The survey is expected to be completed in the fall of 1988.

Question: (c) The number of Pell Grant recipients using their awards in two-year public, two-year private, four-year public and four-year private institutions.

Answer: The following information compares Pell Grant recipients for the 1986-87 and 1987-88 award years assuming linear reduction for 1986-87 and full funding for 1987-88.

	1986-87	1987-88
Two-Year Public	734,000	780,000
Two-Year Private	48,000	52,000
Four-Year Public	835,000	915,000
Four-Year Private	432,000	472,000
Other Public	27,000	29,000
Other Private	15,000	16,000
Proprietary	571,000	603,000

NOTE: Two-year category also includes schools with three-year programs. Proprietary category includes all profit-making schools participating in the Pell Grant program. Totals do not match recipient estimates due to rounding and the effects of external adjustments.

Question: (d) The number of Pell Grant recipients who receive other student financial assistance.

Answer: Unfortunately, the Department is unable to provide unduplicated information on students receiving aid from more than one Federal student assistance program. We are currently undertaking a major survey of aid recipients nationwide which should provide us with data on the various kinds of student financial aid received by students attending postsecondary education. The survey is expected to be completed by the fall of 1988. According to the Cooperative Institutional Research Program survey of first-time, full-time dependent freshmen students, 50.3 percent of the Pell Grant recipients in that group also received other forms of Federal student aid.

PELL GRANT APPLICATION PROCESSING SYSTEM

Question: What steps is the Department taking to automate the processing of Pell Grant applications, such as developing machine-readable application forms and computer tape files for schools?

Answer: The Department's recent contract award for processing Pell Grant applications continues our efforts to streamline the application system while reducing unnecessary Federal costs. Enhancements to the processing system will enable applications to be processed within 10 to 14 days compared to 21 to 28 days. Computer tape files of applicants, which are also available to institutions in hard copy, will continue to be provided to institutions upon request.

To further improve the delivery of student assistance, the Department is experimenting with an electronic system of processing applications with institutions. Under this pilot program, each participating institution can make corrections to applications via a computer terminal without having to send corrections to the processing center by mail. This process will significantly decrease the time it takes to correct applications and make final awards to students.

PROPOSED TERMINATION OF SUPPLEMENTAL GRANTS

Question: The Reagan Administration's fiscal year 1988 budget requests no funding for the Supplemental Educational Opportunity Grant (SEOG) program. How many students would be affected under this proposal?

Answer: Approximately 720,000 students who would otherwise receive a Supplemental Grant in 1987-88 would be affected.

ALTERNATIVE STUDENT AID SOURCES

Question: For these students, what will be their alternative source of student aid?

Answer: One source of aid available to these students is State assistance. A survey conducted by the National Association of State Scholarships and Grant Programs anticipates that there will be a 13

percent increase this year in State spending on grants and scholarships for needy undergraduates. For 1986-87, States expect to award a total of $1.39 billion to 1.4 million needy undergraduates in college. Last year, $1.23 billion was awarded to 1.3 million undergraduates. The average undergraduate who receives State aid is expected to get $1,034 of State aid as compared to $947 last year.

Question: How many of these students are already relying on loans (either Perkins Loans or regular Guaranteed Student Loans)?

Answer: Currently we do not collect SEOG program statistics that would give us exact data on how many SEOG students are using Federal loans. We do collect sample data of first-time, full-time dependent freshmen and these data indicate that almost 66 percent of SEOG recipients also receive a Federal loan (33 percent receive a GSL only, 15 percent receive a Perkins Loan only, and 18 percent receive both).

Question: Have Supplemental Educational Opportunity Grants (SEOG) been traditionally tied to Pell Grants or are there some SEOG recipients who have not received Pell Grants and what portion of all Supplemental Educational Opportunity Grant recipients currently do not receive Pell Grants?

Answer: While the majority of SEOG awards go to students who have also received Pell Grants, the receipt of a Pell Grant has not traditionally been a criterion for receiving an SEOG award. Students do receive SEOG awards who have not received Pell awards, particularly at higher costs institutions. While we do not have statistics on the number of students receiving SEOGs who have not received Pell awards, a recent GAO survey found a substantial number of such cases. Also, in the annual survey of first-time, full-time dependent freshmen, approximately 33 percent of SEOG recipients did not receive a Pell Grant. The Higher Education Amendments of 1986 now include language to require that SEOG awards be made first to students with exceptional need and that priority be given to students who have received Pell Grants.

SEOG RECIPIENTS BY INCOME RANGE

Question: You indicate in your budget documents that the Supplemental Educational Opportunity Grants program "does not target funds to the neediest students." How are you defining neediest students?

Answer: We would define neediest students as those with the lowest adjusted gross family incomes. While some might select different income levels as "low" or "middle" income, the fact is that institutions which make SEOG awards provide a large proportion of their funds to students with family income levels of $30,000 or more (almost 10 percent) when compared to the Pell Grant program which provides less than two percent to students with incomes of $30,000 or more.

Supplemental Grants-
Distribution of Awards
1984-85

Income	Recipients		Funding	
	Number	Percentage	Grants	Percentage
Dependent				
0- $5,999	77,076	11.8	$38,595,835	10.3
$6,000- $11,999	80,018	12.3	43,966,154	11.8
$12,000- $17,999	80,665	12.4	49,096,357	13.2
$18,000- $23,999	69,107	10.6	44,605,316	11.9
$24,000- $29,999	55,762	8.6	37,139,769	9.9
$30,000+	64,040	9.8	44,394,678	11.9
	426,668	65.5	257,798,109	69.0
Independent	225,186	34.5	115,796,239	31.0
Less than 1/2 time	160	*	52,163	*
	652,014	100.0	373,646,511	100.0

*Less than 0.5 percent

PROFILE DATA OF SEOG RECIPIENTS

Question: You indicate that almost 12 percent of Supplemental Educational Opportunity Grant (SEOG) funds were awarded to dependent students in families with annual adjusted gross incomes in excess of $30,000. A crucial factor in awards to families with relatively high incomes is the family size. What was the family size of those individuals? Is there anyway to determine how many of the SEOG recipients are either at or below the poverty level?

Answer: The Cooperative Institutional Research Program collects data for first-time, full-time dependent freshmen which indicate a difference in family size for SEOG recipients, depending on income. The average family size for 1985-86 recipients with incomes below $30,000 was 3.56 while the average family size for recipients with incomes above $30,000 was 4.9.

In the 1984-85 award year, 157,094 awards (24.1 percent of the total number of SEOG awards) were made to dependent students with family incomes below $12,000. The Bureau of the Census poverty threshold for a family of four was $10,609 in 1984.

Question: Are there data to indicate whether Supplemental Educational Opportunity Grants (SEOGs) are used more by first-time, full-time dependent freshmen than others?

Answer: Our data on recipients do not include a breakdown that would indicate how many SEOG awards are made to freshmen students.

Question: How many less than half-time students actually participated in the SEOG program, and can you tell us what type of postsecondary student is likely to be the recipient of these grants?

Answer: Institutional reports indicate only 160 less-than-half-time students received awards in the 1984-85 award year. It is difficult to sketch a profile of a typical SEOG recipient because institutions have widely varying costs and packaging practices.

SEOG AWARDS BY TYPE OF INSTITUTION

Question: Can you tell us the types of postsecondary institutions that SEOGs are most likely used?

Answer: The following table shows allocations for the SEOG program by type of institution for the 1983-84 and 1984-85 award years. The following table shows private four-year institutions have the largest share of SEOG awards, closely followed by four-year public institutions.

Distribution of SEOG Awards and Funding by Institutional Type and Control
(Dollars in thousands)

	1983-84				1984-85			
	Funds	%	Recip-ients	%	Funds	%	Recip-ients	%
Public								
Two year	$ 44,511	12.3	106,318	16.4	$ 46,884	12.5	109,401	16.8
Four year	135,127	37.4	239,787	36.9	137,673	36.8	241,749	37.1
Subtotal	179,638	49.8	346,105	53.3	184,557	49.3	351,150	53.9
Private								
Two year	6,675	1.8	14,825	2.3	6,668	1.8	13,738	2.1
Four year	144,227	40.0	206,196	31.8	150,022	40.2	203,838	31.3
Subtotal	150,902	41.8	221,021	34.1	156,690	42.0	217,576	33.4
Proprietary	30,456	8.4	81,456	12.6	32,400	8.7	83,288	12.7
Total	360,996	100.0	648,582	100.0	373,647	100.0	652,014	100.0

MINORITY PARTICIPATION IN SEOG PROGRAM

Question: Have minorities benefitted from the Supplemental Educational Opportunity Grant program? If the Supplemental Educational Opportunity Grant program is eliminated, what would be the effect on the financial ability of women and minorities to pursue postsecondary training?

Answer: We do not collect data for the SEOG program that would identify the participation rate of minorities or different genders. However, the Department is currently undertaking a major survey of aid recipients nationwide which will provide data by sex and race.

The Cooperative Institutional Research Program collects information for first-time, full-time dependent freshmen which indicate that 4.8 percent of all freshmen, 5.1 percent of the women freshmen, and 8.5 percent of the minority freshmen received a Supplemental Educational Opportunity Grant.

Since the Department's budget proposals would provide additional funding for the Income-Contingent Loan program, and unlimited loan capital to students through the Supplemental Loans for Students (SLS) and PLUS programs, women and minority students who previously received funds from the SEOG program could borrow funds to pursue postsecondary training at the college of their choice.

PURCHASING POWER OF SEOG AWARD

Question: How does the average Supplemental Educational Opportunity Grant award compare with college costs at various types of postsecondary institutions?

Answer: The average award for SEOG is $550 as compared to the following undergraduate college costs as taken from The College Cost Book prepared by The College Board for 1987-88.

Public Institutions		Private Institutions	
All	$3,850	All	$9,536
Universities	$4,449	Universities	$11,925
Four-Year	$4,070	Four-Year	$9,134
Two Year	$3,110	Two Year	$6,976

Question: You indicate that the majority of Supplemental Educational Opportunity Grant awards are used at public and private four-year institutions. If funding were eliminated for these grants, would you be eliminating the element of choice for those financially needy students to attend higher cost institutions?

Answer: The element of choice would not be eliminated because other student aid programs are available--in particular the loan programs. Our proposed major expansion of the Income-Contingent Loan program, and the proposed elimination of loans limits in the SLS and PLUS loan programs would increase the availability of self-help funds to students and increase institutional "choice".

INCOME-CONTINGENT LOANS

Question: In your budget documents, you state that participants in the current Income-Contingent Loan pilot program must have demonstrated administrative responsibility. With the expansion of this program from a $5 million activity to a $600 million full-scale program, how do you know whether there will be sufficient institutions with such demonstrated administrative responsibility to implement the program?

Answer: Our experience has shown that a sufficient number of colleges and universities exist that do a decent job administering the Federal student financial aid programs. For example, in 1985 well over 1,800 institutions had default rates of ten percent or less, a fairly accurate barometer of acceptable management practices. We believe that we will have no problem in expanding the program as we proposed in the fiscal year 1988 budget to 1,500 institutions--a little less than one-half the number participating in the Perkins Loan program.

Question: What evaluation requirements, if any, do you propose for the expanded Income-Contingent Loan program you propose?

Answer: As with all programs in which funds are given to institutions of higher education, those institutions which receive funds will be required to submit data to the Department on the use of funds provided under the expanded Income-Contingent Loan program. We do not as yet anticipate requiring any additional evaluations from these institutions. We will be continuing our evaluation of the demonstration institutions begun in 1987, however, to assist in fine-tuning the administration of this program.

Question: Would all participating institutions be expected to collect data and report findings concerning the program to the Department?

Answer: As part of the general administration of the Income-Contingent Loan program, institutions would have to collect and maintain data on the program. The Department would require the institutions to provide the kinds of data which the Secretary would need to adequately assess the effectiveness of the program.

SALE OF STUDENT LOAN PORTFOLIOS

Question: In the budget justifications you state that you will propose legislation to provide for the sale of certain student loan portfolios on which Federal collection efforts have failed, with the proceeds from the sale being used to help finance the Income-Contingent Loan program. Which types of Federal loans would be offered for sale--regular Guaranteed Student Loans, PLUS loans, Supplemental loans?

Answer: Only the sale proceeds on the Perkins (Direct) Loans which are assigned to the Department for collection would be used to supplement the Federal capital contributions to the ICL program.

Question: How would these loan sales be undertaken?

Answer: The Department would use the same methods for selling loans as are currently used for the college housing and academic facilities loans. Once the legislation authorizing the sale is enacted by Congress, we would retain the services of a financial advisor who would assist the Department in packaging the loans for sale. The packaged loans would then be sold through either public or private offerings depending upon which method would yield the highest return for the Federal Government.

Question: Why have not loan sales been used before as a revenue source for Federal student loans?

Answer: The primary reason loan sales have not been used to generate capital for student loans is that we lacked legal authority necessary to sell these loans. The 1986 amendments gave the Department authority to sell defaulted Guaranteed Student Loans. We are now seeking that authority for Perkins Loans as well.

Furthermore, the Department had sought for a number of years legislation to provide additional tools for collecting on defaulted loans. Now, with these tools in place, we believe our collection efforts will be very effective in getting the majority of defaulted loans into repayment. Also, we will now be able to evaluate the costs and benefits of our collection efforts using these new collection tools, and assess the appropriate, most cost beneficial action to pursue, including loan sales.

DISTRIBUTION OF ICL CAPITAL CONTRIBUTIONS

Question: How would Federal Income-Contingent Loan capital contributions be distributed among participating institutions under your budget proposal?

Answer: Loan capital would be distributed to institutions participating in the Income-Contingent Loan program on the basis of demonstrated performance in loan administration and program management, and aggregate student need.

Question: What would be the average annual amount available to institutions and how does this compare to the average Perkins Loan capital contribution?

Answer: In 1988 under our proposal, the average institutional allocation under the Income-Contingent Loan program would be just under $500,000. This amount would be almost nine times greater than the current average Perkins Loan capital contribution which will be $56,500 in fiscal year 1987.

ICL ELIGIBILITY FINANCIAL NEED TEST

Question: Do you propose a financial need test to determine eligibility for income-contingent loans and if so, how would it differ from need standards used for Perkins Loans?

Answer: Under the expanded Income-Contingent Loan program, we would provide funds only to financially needy students as determined by the need analysis system provided under Part F, Title IV, of the Higher Education Act. This is the same need analysis system which is to be used for the Perkins Loan program.

BASIS FOR INCOME-CONTINGENT LOANS

Question: Why is the untested income-contingent loan the focal point of your budget request for student aid, when Congress has repeatedly rejected the broad scale implementation of such a program?

Answer: Congress has recognized, as we have, the need to make student loan debt more manageable. The Income-Contingent Loan program was first proposed with the fiscal year 1987 budget. Congress immediately recognized the importance of this concept, provided the necessary authorizing legislation for a pilot program, and appropriated $5 million to get it started. Congressmen Petri and Jeffords and others also have introduced similar proposals.

We expect that Congress will see that what is needed is not a study of this concept, but an infusion of loan capital to enable students to get the money they need to attend college--funds which are repaid under realistic terms based on income.

EXPANDING THE INCOME-CONTINGENT LOAN PROGRAM

Question: Mr. Secretary, your justification for declining to fund the newly-authorized Rehabilitation Services Supported Employment program is that the Department's Supported Employment Demonstration Projects--begun two years ago--haven't been fully evaluated. Despite earlier research that has validated the Supported Employment concept, you are apparently reluctant to expand it from a $14 million demonstration to a $22 million grant program.

I find it curious, Secretary Bennett, that you exhibit none of the same reluctance when it comes to Income-Contingent Loans. In that case, you are willing to balloon a $5 million demonstration into a $600 million program when the demonstration hasn't even begun.

How do you explain your caution in modestly expanding a proven program, on the one hand, and a 120 fold increase for the Income Contingent Loan program, largely on the other?

Answer: When we proposed the Income-Contingent Loan program on the Administration's reauthorization proposals, it was not to be a demonstration program but a fully implemented program. We think that there is adequate evidence that such a program is needed now, will work, and will be effective, so we do not see the need to wait for the results of an evaluation which could not occur for more than five years. Institutions have had long term experience administering a student loan program and students have had to borrow to pay college costs for many years. The reform provisions needed for a student loan program are provided in the ICL program. These provisions are long overdue.

STUDENT DEBT BURDEN

Question: What is the average debt burden incurred by undergraduate students under federally sponsored student loan programs, including the total payout in principal and interest?

Answer: The Department does not have a great deal of data on the aggregate amount of student debt for those who are currently enrolled or who recently graduated from postsecondary education. One source of aggregate student aid data on debt is High School and Beyond--a longitudinal study sponsored by the Center for Education Statistics--begun in 1980. Data from this study of high school seniors who graduated in 1980 and later pursued and completed a four-year degree program indicate that students who attended public colleges accumulated debt of $4,907 and those who attended private colleges accumulated debt of $7,033.

If we assume that these loans were Guaranteed Student loans with an interest rate of nine percent, the monthly payment for those who attended public institutions would be $62 and for those who attended private institutions would be $89. The study also showed that nearly all student loan borrowing occurred under the Federal loan programs.

Question: How would this change under your proposed restructuring of student loan programs?

Answer: We cannot predict precisely what impact the changes proposed to the student loan programs would have on the accumulation of student debt. We are not sure, for example, if students would choose, in the face of a reduction in grant and subsidized loan aid, to increase debt or attend less costly schools. Our proposal is designed to reduce the burden of the debt on those borrowers by relating the annual payment to the borrower's ability to repay--his income. In that way, students can borrow what they need yet face a more manageable repayment schedule.

Question: The Administration has proposed a substantial expansion of student loans with income-contingent repayment schedules without experience data for the experimental program authorized last year.

Does the Department know or have an estimate of what impact the expanded Income Contingent Loan program will have on students' debt burdens?

Answer: We believe that the expanded Income-Contingent Loan program will make it easier for student borrowers to repay even though the total debt would increase.

APPROPRIATE LEVEL OF DEBT BURDEN

Question: Have any studies been completed or are any planned to determine what percent of a borrower's income can reasonably be devoted to repaying student loans?

Answer: According to a survey conducted in 1985 by Dr. Joseph D. Boyd and sponsored by the National Association of Student Financial Aid Administrators, borrowers who devote 10 percent or more of their gross incomes to educational loan payments perceive it to be a "burden" to some extent. On the other hand, income-contingent loan proposals by the Administration, Congressman Petri, and others have usually taken 15 percent as a reasonable cap. The Department is concerned about the general subject of student loan burden and its potential to affect career choice and other individual decisions. We are planning to study this subject by several means, including the out-of-school phase of the new National Postsecondary Student Aid Survey, and analysis of data from the High School and Beyond Study and National Longitudinal Study. This is a complicated area where more work is needed to disentangle what students feel about being in debt, from what that debt actually does to affect their behavior.

Also, during the development of the Notice of Proposed Rule-Making for the Income-Contingent Loan program, the Department studied the issue to develop reasonable repayment schedules based on borrower income. As a result of public comments on this matter, we will be revising the repayment schedule in the final regulation. So, the final ICL repayment schedule relating payment to borrower income will be the result of considerable study by the Department and the financial aid community.

BORROWER REPAYMENT UNDER ICL PROGRAM

Question: The Administration proposes that borrower repayment of these loans be based on borrowers' adjusted income from the preceding year, based on schedules the Secretary of Education develops. Recognizing that verifying student status has generally been difficult in the Guaranteed Student Loan program, who will make the periodic adjustments to the repayment schedules?

Answer: The Department will revise the repayment schedule as necessary but we expect that, once this program is fully operational, few changes will be made to the repayment schedule. What will be verified is the borrower's income on which the payment is based. We are requiring submission to the school of a copy of the borrower's Federal tax return to provide that verification.

Question: What assurance does the Department have that these schedules will be accurately updated in a timely manner?

Answer: The schedules are to be developed and distributed by the Department itself. It is the institution's responsibility then to calculate the student's repayments based on these schedules. That calculation will be relatively simple. In fact, the Department is developing simple computer software which institutions may use for this purpose.

Question: What will be the administrative cost of annually verifying the borrower's income and adjusting his or her monthly payments?

Answer: The institutions participating in the Income-Contingent Loan program will have only marginally greater administrative costs than under the current Perkins Loan program. We believe that with appropriate software, these costs can be minimized. The Department is currently developing such software which will be tested as part of the ICL pilot program currently underway.

UNIVERSITY SPONSORED ICL PROGRAMS

Question: Income-Contingent Loan programs have been developed and implemented in at least two instances--at Yale University and by the State of Minnesota. Has the Department studied the experience of these programs in developing its proposals and, if so, in what ways?

Answer: The Department in developing its proposal for an Income-Contingent Loan program examined the experiences of a number of loan programs, including those mentioned.

The Yale University experience was of particular interest. Under this program, each cohort of loans was kept discrete with borrowers with higher income subsidizing the costs of borrowers earning lower salaries. While we found this concept interesting, we did not feel it was appropriate to include such an idea in the Federal program and felt that aspect of the program contributed to its poor showing.

The ICL program would not have one group of students subsidizing another. Each income group would be responsible for paying its loans. Those with low incomes, for example, would have smaller payments but would pay longer.

PERKINS LOANS BUDGET REQUEST

Question: The fiscal year 1988 budget request recommends no new Federal funding for capital contributions to the Perkins Loan program and in the fiscal year 1988 revised request would rescind $188 million in Federal capital contributions. What is your rationale for eliminating one of the oldest loan programs in favor of an income-contingent loan plan which as yet has not been tested?

Answer: While the Perkins Loan program is, as you point out, one of the oldest loan programs, it does not necessarily follow that it is the best program for college students or for the American taxpayer. We have built upon our experience with the Perkins Loan program to develop a new program which will meet the needs of today's college students yet has little or no long-term cost to the Federal Government.

The Income-Contingent Loan program has a number of Perkins Loan features, as well as others which make it superior to the current Perkins Loan program. Most importantly, repayment terms under the Income-Contingent Loan program would be based on income. Borrowers will repay on more manageable terms. Second, because the interest rate charged to borrowers will be higher, less implicit subsidy will be provided by the Federal Government. The institutional revolving funds will be replenished much faster, enabling more loans to be made to more needy students. Third, students just out of school with entry-level incomes often must struggle to afford the high payments required by short-term fixed payment programs. As a result, we believe that the default rate under the new program will be far lower than the 14.04 percent potential loss rate experienced under the Perkins Loan program. This will assure the long-term availability of loan capital for future college students.

Question: How many students would be eliminated from the Perkins program?

Answer: Approximately 472,000 fewer students would receive Perkins Loans in 1988 compared to 1987 if our policy were adopted. This would be compensated for by an increase in Income-Contingent Loans of over 1,000,000 recipients.

Question: Why are you not electing to fund the Perkins Loans in tandem with the new income-contingent loan demonstration project authorized in the Higher Education Amendments of 1986?

Answer: A Federal loan program which charges no interest during in-school, grace, and deferment periods and then just five percent during principal repayment is simply not sufficiently cost-effective to warrant further Federal investment. Also, even with no new appropriations, almost $400 million in payments by former borrowers will reimburse Perkins Loan revolving funds and provide a source of loan capital for new loans.

We do believe that the new Income-Contingent Loan program should be expanded. As previously noted, there are a number of key features which make the Income-Contingent Loan program more effective at meeting the needs of students. With the escalating cost of higher education, we need to assure our Nation's college students that they will be able to obtain loans with repayment terms which they will be able to afford upon graduation. The continuation of the current programs into the 1990's will not achieve this goal.

Those institutions which do not choose to participate in the Income-Contingent Loan program immediately could still make Perkins Loans from their institutional revolving funds.

FEDERAL CAPITAL CONTRIBUTIONS

Question: How much funding in fiscal year 1988 would you need for the Perkins Loan program if your budget request were not accepted?

Answer: We do not believe that any new Federal capital is needed for the Perkins Loan program. As mentioned in the earlier response, sufficient loan capital is available for new loans in institutional revolving funds from the payments of former borrowers.

LOAN LIMITS--PERKINS LOANS AND ICLS

Question: As compared to Perkins Loans, what will the new loan limits be for income-contingent loans?

Answer: The loan limits for the Perkins Loan program are as follows: $4,500 aggregate for the first two years of undergraduate study; $9,000 total for undergraduate study; and $18,000 total for graduate and undergraduate study.

The loan limits proposed for the Income-Contingent Loan (ICL) program are as follows: $4,000 for each of the first two years of undergraduate study; $5,000 for each succeeding year of undergraduate study (with an aggregate limit for undergraduate study of $23,000); and $10,000 for each year of graduate study (with an aggregate limit for graduate and undergraduate study of $50,000).

As you can see from the preceding discussion, the loan limits for the Income-Contingent Loan program would be much higher than under the Perkins Loan program. Even if our proposal to increase the loan limits were not adopted, the Income-Contingent Loan program would still have higher limits than those offered under the Perkins Loan program (except that graduate study is currently excluded).

PERKINS AND INCOME-CONTINGENT LOANS

Question: The Perkins Loan has been a very low-interest rate loan for some time. In your opinion, would the same students taking part in the Perkins Loan program be attracted to the new income-contingent plan and what evidence do you have that would support your answer?

Answer: We believe that the new Income Contingent Loan program will attract the same kinds of students that the current Perkins Loan program does. The response to this new program to date has been quite favorable. What we are hearing is that most students are more concerned about monthly payments than the interest rate. This is not surprising when one considers what has been happening with automobile financing. While auto makers are offering low interest rates on new cars, most buyers instead are taking out longer-term, higher interest loans because the monthly payments are much lower. This is also, of course, consistent with consumer behavior in the area of home mortgages.

Question: What is the current default rate on Perkins loans?

Answer: As of June 30, 1985 the cumulative "potential loss" default rate was 14.04 percent.

Question: Has this been a major factor in making fiscal year 1988 budget decisions about Perkins Loans?

Answer: Yes, but only in part. The major factor in making 1988 budget decisions about the Perkins Loan program has been our concern for the debt burden of the student and the cost of the program to the taxpayer. That is why the Department has advocated the new Income Contingent Loan program. If the new loan program is successful, there should be lower default rates due to the program's unique repayment plan.

Question: In your opinion will deferments and the new default penalty help to reduce the default rate for those loans?

Answer: In our opinion, the new default penalty will help reduce the default rate for the Perkins Loans by giving institutions additional incentives to improve their collections. They will be ineligible for, or eligible for less, new Federal capital if it becomes available.

PERKINS LOANS--STUDENT DEBT BURDEN

Question: What is the average debt burden of a student borrowing currently under the Perkins Loan program and what is the average amount the student must pay each month during repayment?

Answer: We do not have reported to us recipient-specific data. The loans are made and collected by institutions and the Department receives individual debt data only in cases where an institution has chosen to assign defaulted loan paper to the Department.

However, one source of aggregate student aid data debt is High School and Beyond--a longitudinal study sponsored by the Center for Education Statistics--begun in 1980. Data from this study of high school seniors who graduated in 1980 and later pursued and completed a four-year degree program indicate that students who attended public colleges accumulated debt of $4,907 and those who attended private colleges accumulated debt of $7,033.

If we assume that these loans were Guaranteed Student loans with an interest rate of nine percent, the monthly payment for those who attended public institutions would be $62 and for those who attended private institutions would be $89. The study also showed that nearly all student loan borrowing occurred under the Federal loan programs.

Question: What types of studies are students who receive Perkins Loans involved in?

Answer: We have no evidence that students who receive Perkins Loans pursue any studies different from the general student population.

PERKINS LOANS AND CAMPUS-BASED PROGRAMS

Question: The Administration proposes to virtually eliminate funding for campus-based programs: Perkins (formerly National Direct Student) Loans, Supplemental Educational Opportunity Grants, and College Work-Study, but does not anticipate a decrease in the overall number of students attending school.

What is the basis for the Department's estimate that there will be no decrease in attendance as a result of the reductions in the campus-based programs?

Answer: The Department does not anticipate a decline in postsecondary enrollment as a result of our fiscal year 1988 budget request to eliminate funding for the campus-based programs (Supplemental Educational Opportunity Grants, College Work-Study, and Perkins Loans programs). In spite of those reductions, our fiscal year 1988 budget request would still provide more than $13 billion in federally generated student assistance to more than 4.7 million students. This amount would be in addition to approximately $2 billion available from States and more than $4 billion from private sources.

EFFECT OF DECREASED CAMPUS-BASED AID ON BORROWING

Question: Does the Department have an estimate of what increases in loan volume and average indebtedness are expected from the decrease in campus-based funding?

Answer: The Department anticipates that borrowing under the Guaranteed Student Loan program will increase by $385 million in fiscal year 1987 and by $665 million in fiscal year 1988 as a result of the requested changes in other Title IV aid programs. We are unable to predict with accuracy any effect on average indebtedness. Clearly, for some students, indebtedness can be expected to increase. Our proposals for expansion of the Income-Contingent Loan program are, of course, designed to allow increased borrowing by the neediest students, for those who choose to do so, without substantially increasing repayment burden.

PERKINS LOANS--DEFAULTS

Question: With Federal contributions to the Perkins Loan program ended, will the Department still be responsible for defaults?

Answer: Under the Perkins Loan program, schools are primarily responsible for collection of student loan defaults. Generally, once all attempts have been made to collect a defaulted student loan, the institution may assign or refer the loan to the Secretary for collection. This procedure would continue to exist under the Department's fiscal year 1988 budget request.

COLLEGE WORK-STUDY

Question: Why does the Administration propose to reduce Work-Study funding when it earlier had supported the concept of students working for their aid, and two years ago wanted to increase funding for this program by over 50 percent?

Answer: There are several reasons. One of the reasons the Administration is proposing the elimination of funding for this particular program is because of the improving job market for college students. There were 106.8 million Americans employed in 1984-85 and 109.6 employed in 1985-86--an increase of 2.8 million. Many students are able to find more employment opportunities with better pay off-campus, leading to widespread reports of campus jobs going begging. Another reason is the general need to reduce expenditures to meet the deficit reduction targets established by the Congress in the Gramm-Rudman-Hollings legislation. Third, viewing Work-Study and student loans as forms of student "self-help" that differ only in when the student has to work (now or in the future), the Department is proposing to continue the availability of self-help aid but to shift it to loans. This has the dual advantage of being less expensive to the taxpayer and providing the student with a better learning environment while in school. In addition, this represents the Administration's policy of reducing aid to institutions, such as Work-Study, while promoting more direct aid to students, as the Supplemental Loans for Students program, thereby giving students a wider choice in the selection of a postsecondary institution.

Question: How may students would be affected?

Answer: Approximately 786,560 fewer Work-Study awards would be made in 1988 compared to 1987.

Question: Is there evidence to support the fact that if appropriations for College Work-Study were continued and more jobs were made available (1) that more students would participate in the program and (2) appropriate jobs related to a student's career goal would be found?

Answer: Institutional requests for Work-Study funds have continually increased and we believe that this is a strong indicator that more students would participate in the program if more funds were made available. Efforts are always made by the Financial Aid Officer and the Job Locator Developers to place students in career-related positions.

STUDENT AID PACKAGES--CWS AND OTHER FEDERAL AID PROGRAMS

Question: Do you have an indication as to how many College Work-Study (CWS) recipients are also using other sources of aid to meet the cost of college? How many students, for example, are already receiving either Perkins Loans or Guaranteed Student Loans? How many students are using Work-Study funds in combination with Pell Grants or Supplemental Educational Opportunity Grants?

Answer: Program data are not reported to us in such a way that we know how many of the College Work-Study recipients also participated in the Pell or SEOG programs or how many received Perkins or Guaranteed Student Loans. However, the Cooperative Institutional Research Program (CIRP) survey of a sample of first-time, full-time dependent freshmen students in 1985-86 found that 13.6 percent of Work-Study students received no other form of aid. This means that the major proportion (86.4 percent) of Work-Study students receive other kinds of financial assistance. Approximately 63 percent of College Work-Study recipients received a Federal grant and almost 67 percent received a Federal loan.

Question: What alternative sources of student aid are available to current College Work-Study recipients who have already borrowed and received the maximum from other Federal student aid programs?

Answer: There are several other avenues that could be explored by such students for additional funding. State aid is a major source. It is anticipated that there will be a 13 percent increase this year in awards from States for needy undergraduates. For 1986-87, States expect to award a total of $1.39 billion to 1.4 million needy undergraduates. There are also available for students a variety of private as well as institutional scholarships.

However, since the maximum limits for most Federal aid programs have just been substantially increased, it is unlikely that many students would have fully utilized their eligibility for other Federal aid. Also, under the President's 1988 budget proposals, all PLUS and SLS annual and cumulative loan limits would be eliminated in order to provide additional access to loan capital, but without additional Federal cost.

PURCHASING POWER OF COLLEGE WORK-STUDY AID

Question: Has College Work-Study aid kept pace with the escalating costs of college?

Answer: Listed below are the Federal funds appropriated by Congress and the costs of attending college for the last five years.

Fiscal Year	CWS Appropriation	Costs	
1982	$528,000	Public	$2,668
		Private	$6,184
1983	$590,000	Public	$2,994
		Private	$6,920
1984	$555,000	Public	$3,156
		Private	$7,509
1985	$592,000	Public	$3,383
		Private	$8,156
1986	$567,000	Public	$3,683
		Private	$8,830

We caution against focusing on just Work-Study aid, because it generally takes a combination of available aid to meet a student's need. Therefore, increases in the other programs, particularly Pell and GSL programs, which have been much greater than those experienced in the Work-Study program, should be considered as additional offsets toward escalating college costs.

Question: What proportion of a student's cost of attendance does College Work-Study cover?

Answer: The portion of a student's cost of attendance covered would vary from student to student depending on the cost of attendance at the institution the student is attending. In general, the average Work-Study award of $880 represents 24 percent of the average public and 10 percent of the average private cost of post-secondary education.

STATE STUDENT INCENTIVE GRANTS

Question: The fiscal year 1988 budget request would eliminate funding for the State Student Incentive Grant (SSIG) program. How many State grants and scholarships have actually been provided over the life of the program and how many recipients would be eliminated from the program?

Answer: There have been 2,647,098 State Student Incentive Grants made since the beginning of the program. If the program were to be eliminated and if the States did not spend their required matching share, 276,000 students would not receive awards for fiscal year 1988.

Question: If the States did not continue to provide these grants, what alternative student aid would be available to these students?

Answer: There would still be the other Federal student aid programs as well as the availability of institutional funds and private scholarships. The Department would not expect any diminution of State effort in this area and believes that State spending trends in recent years fully justify this expectation.

Question: Many States have given grants to part-time students under the State Student Incentive Grant (SSIG) program. What is the average SSIG grant for students who attend postsecondary schools less than half-time?

Answer: We do not have any data for the State Student Incentive Grant program that would break down awards to indicate what portion of the funds is going to part-time students.

SSIG RECIPIENTS BY INCOME RANGE

Question: What is the average amount of a State Student Incentive Grant and can you give a profile of the students who are aided through this program?

Answer: The average amount of a State Student Incentive Grant award is $550. We do not collect data that would enable us to give a profile of students who are aided through SSIG. However, we can provide the percentage of awards by income level for the 1985-86 award year.

Income Levels	Percentage of Recipients
$0 to $ 9,999	52.5
$10,000 to $19,999	24.0
$20,000 to $29,999	15.2
$30,000 to $39,999	5.9
$40,000 and over	2.4

STATE CONTRIBUTIONS TO SSIG PROGRAM

Question: The rationale to end Federal support for State Student Incentive Grants (SSIGs) in the past has been that States already spend more on program activities supported by SSIGs than is available through the Federal program. How many States actually spend more than the Federal Government on SSIGs?

Answer: Forty-four States actually spend more than the Federal Government on SSIG's.

Questions: Which States appear to spend the most on these activities?

Answer: In 1986-87, the Federal SSIG program constituted 10 percent or less of State scholarship need-based aid for the following States--Arkansas, California, Colorado, Connecticut, Illinois, Indiana, Iowa, Kentucky, Massachusetts, Michigan, Minnesota, New Jersey, New York, Ohio, Oklahoma, Pennsylvania, Rhode Island, South Carolina, Tennessee, Vermont, and Wisconsin. Of course, this is only one demonstration of State support for higher education. Other States contribute more in other ways such as directly supporting a strong public system of higher education.

Question: How many States contribute only the statutory match of $1 for every Federal $1 received?

Answer: Eight States--Arizona, District of Columbia, Idaho, Hawaii, Louisiana, Mississippi, Montana, and Wyoming.

Question: How many States would consider the Federal money crucial to their ability to continue activities funded by the State Student Incentive Grant program?

Answer: We do not believe that many would. The SSIG program was first authorized in 1972 specifically to provide an incentive to States. It has accomplished that purpose. As of fiscal year 1986, all States have their own scholarship programs. Over $1 billion is contributed by the States with most States significantly overmatching. Only eight States do not overmatch SSIG funds. Given this level of State commitment and the fact that the Federal funding constitutes such a small portion of the total, we would not expect to see any significant reduction in State support.

Question: Is there any difference in the economic backgrounds of students and types of postsecondary institutions attended by students who live in States that contribute significantly to this program compared to States who have difficulty meeting the Federal matching requirements?

Answer: We do not have data that would reflect the economic backgrounds of students or the types of postsecondary institutions attended on a State-by-State basis. States that contribute significantly to SSIG vary from the relatively wealthy State of New York to the less wealthy State of South Carolina--with wealth being the relative amount of tax revenue available for public use.

HIGHER EDUCATION

TRIO PROGRAM REDUCTIONS

Question: Secretary Bennett, your budget would cut funding by over 50 percent for the Special Programs for the Disadvantaged, commonly known as the TRIO programs. These programs serve the important function of giving disadvantaged students support services and information to encourage them to go on to college and to keep them from dropping out once they are there.

Given the reduction in the percentage of Black high school graduates enrolling in college and concern over minority dropout rates, it is hard to understand why you would propose such a crippling cut.

Do you have any data that indicates the TRIO programs are not working?

Answer: The Systems Development Corporation, Applied Systems Institute, Inc., and the General Accounting Office have all done reviews of the Student Support Services and Upward Bound programs which indicate the relative success of these programs in influencing disadvantaged youths to apply to college, obtain financial aid,

attend college, and persist in college. Impact evaluations have not been conducted of the Talent Search or Educational Opportunity Centers programs. The proposed reductions in funding for the TRIO programs are not a result of any ineffectiveness demonstrated in meeting the goals for which they are established.

TRIO PROGRAM REDUCTIONS

Question: Why then would you propose a reduction that would terminate services to over 350,000 disadvantaged students?

Answer: We believe that in this time of such severe budget constraints, Federal funds for postsecondary education must be carefully targeted at the most critical areas, and that duplicative or overlapping services must be eliminated. Many of the counseling and information services provided through the TRIO authorities for which we are requesting no funding are also provided elsewhere. We have found that with the declining population of traditional high school-age graduates, colleges and universities are simply having to compete with each other to enroll those students. We have noticed in the HEGIS reports that colleges and universities are beginning to spend significantly more money on admissions and recruitment. We believe that "outreach" responsibility truly lies primarily with colleges and high school counselors.

GUARANTEED STUDENT LOANS

LENDER PARTICIPATION

Question: What do you believe will be the impact on lender participation in the Guaranteed Student Loan program of your proposed reduction in lender yield on regular loans to the Treasury bill rate plus 2.75 percent as well as reducing Federal loan insurance coverage from 100 percent to 90 percent?

Answer: We believe that our proposals to reduce the special allowance rate and Federal loan insurance would have little, if any, impact on access to loan capital for students. While there are approximately 12,000 lenders participating in the GSL program, recent data show that only 9.3 percent of the total number of lenders in the program originate approximately 80 percent of the loans. For these high volume lenders, the GSL program would continue to be profitable. Lenders that make very few loans may find it unprofitable to continue to make GSLs. However, should some small volume lenders drop out of the program, we believe the large volume lenders--many of whom now actively market GSLs--would assume responsibility for making loans to those students currently served by small volume lenders. The intent of the Guaranteed Student Loan program is to help students pay for their educational expenses, not to assure excessive profits to private lenders.

PROPOSED POLICY EFFECT ON BORROWER COST

Question: What is your estimate of the average additional cost to borrowers of regular Guaranteed Student Loans by eliminating the in-school, grace period, and deferment interest subsidies given projected interest rates under your fiscal year 1988 budget proposal?

Answer: Because the borrower would be responsible for payment of interest accruing during in-school, grace, and deferment periods, he or she would either pay the interest as it accrues, or capitalize the interest by increasing the size of the loan. At the proposed interest rate of six percent for loans for the 1987-88 academic year (which is equal to the current average 91-day Treasury bill rate, rounded to the nearest whole percent), the cost to the borrower would be $60 per $1,000 borrowed per year.

The Department estimates that eliminating the in-school, grace and deferment interest subsidy would save the Federal Government $126 million in fiscal year 1988, $529 million in fiscal year 1989 and greater amounts in subsequent years.

POLICY EFFECT ON UNOBLIGATED BALANCES

Question: If your policy changes for the Guaranteed Student Loan program are not accepted by July 1, 1987, what unobligated funding, if any, will remain in the account for fiscal year 1987?

Answer: If the policy changes proposed in the Department's fiscal year 1988 budget request for the Guaranteed Student Loan program are not enacted by July 1, 1987, we estimate that approximately $632.5 million would be unobligated in fiscal year 1987 and available for use in fiscal year 1988. If the Congress accepts our request to transfer $287 million from the GSL account to the Student Financial Assistance account for use in the Pell Grant program and the proposed policy changes are not enacted by July 1, then approximately $345.5 million would be unobligated in fiscal year 1987.

COLLECTIONS

Question: How much was collected by the Department of Education on defaulted student loans in fiscal year 1986 and how did this compare to fiscal year 1985?

Answer: The Department collected a total of $157 million in defaulted Guaranteed Student Loans in fiscal year 1986. Of that amount, $66 million was collected directly by the Department and $91 million was collected through the IRS income tax offset program. In fiscal year 1985 when no offset program was functioning, the Department collected $87 million in defaulted GSLs.

Question: What accounts for successes in collections?

Answer: The Deficit Reduction Act of 1984 authorized as a pilot program the Federal income tax refund offset program for use in fiscal years 1986 and 1987. The Department believes that the tax refund offset program is an important and highly valuable tool to improve Federal debt collection and we strongly support the extension of this authority beyond fiscal year 1987.

In addition to the Federal income tax refund offset program, the Department uses private collection agencies to locate defaulters, reports defaulted accounts to credit bureaus, refers defaulted accounts to the Justice Department for litigation, and participates in computer matches of Federal employees in default on student loans. These initiatives have contributed to our success in collecting defaulted student loans.

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Question: What were the estimated collections by guarantee agencies in fiscal year 1986 and fiscal year 1985?

Answer: Guarantee agencies are permitted to retain a portion of their default collections to cover the costs of collection. In fiscal year 1985 guarantee agencies collected approximately $206 million, of which $154 million was remitted to the Department. In fiscal year 1986 we estimate that guarantee agencies collected a total of $246 million, of which $169 million was remitted to the Department.

CURRENT SERVICES COSTS ESTIMATE

Question: Your current services estimate of funding necessary for the Guaranteed Student Loan program in fiscal year 1988 is $2.223 billion, or a 26 percent decrease from the fiscal year 1987 appropriation level. What accounts for this reduction?

Answer: The reduction is attributed mainly to a large carryover of funds from the fiscal year 1987 budget to fiscal year 1988. The current services estimate of total net costs to the Federal Government is approximately $2.856 billion for fiscal year 1988. However, approximately $632.5 million of unobligated funds would be available for use in fiscal year 1988, assuming the transfer of $287 million to the Pell Grant program does not occur. The additional $632.5 million would reduce the budget authority for fiscal year 1988 from $2.856 billion to approximately $2.223 billion.

REINSURANCE FEES

Question: Your budget proposes that reinsurance payments be made to guarantee agencies based on the size of the agency's reserves. How many guarantee agencies would be affected by this proposal and which guarantee agencies?

Answer: The purpose of this reduction in reimbursement is simply to recover excessive levels of agency reserves, while also reducing program costs and allowing the Federal Government to recoup a portion of prior years' excessive Federal payments. According to a General Accounting Office report, Guaranteed Student Loans: Guidelines for Reducing Guaranty Agency Reserves (GAO/HRD-86-129BR), published in August 1986, 38 guarantee agencies would have received reduced reinsurance payments if the President's proposed guidelines had been in effect in fiscal year 1986. The specific guarantee agencies which would have been affected are: Arkansas, Colorado, Delaware, District of Columbia, Georgia, Hawaii, Indiana, Iowa, Kansas, Kentucky, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Mexico, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Puerto Rico, Rhode Island, South Carolina, South Dakota, Tennessee, Utah, Virginia, West Virginia, Wisconsin, and Wyoming.

LOAN SIZE AND VOLUME

Question: What has been the effect of the requirement that all students undergo need analysis on borrower eligibility for GSLs and how has it affected the average size of the loans for which students are eligible?

Answer: Since the requirement that students undergo a need analysis went into effect for loans made for periods of enrollment beginning on or after January 1, 1987, it is too early to determine what impact this requirement has had on GSL loan volume. A comparison of loan volume in the first two quarters of fiscal years 1986 and 1987 (see table, below) suggests that total regular loan volume has increased slightly, while PLUS and SLS borrowing has increased dramatically. Regular loan volume in the first quarter showed a substantial increase which may be attributed to delays in processing loan applications in the two previous quarters resulting from confusion surrounding the new verification requirements. The introduction of across-the-board need analysis for loans which were applied for after October 17, 1986, probably accounts for most of the slight dip in second quarter volume. It is still too early, however, to be certain of the impact of need analysis on GSL volume.

GSL Volume in the First Two Quarters of Fiscal Years 1986 and 1987

(#s in thousands - $ in millions - average in $s)

	FY 1986			FY 1987			Change (in %)		
	Q1	Q2	Total	Q1	Q2	Total	Q1	Q2	Total
Regular GSL									
Number	860	624	1,484	911	589	1,500	+5.9	-5.6	+1.1
Dollars	1,980	1,343	3,323	2,156	1,277	3,433	+8.9	-4.9	+3.3
Average	2,302	2,152	2,240	2,365	2,168	2,289	+2.7	+0.7	+2.2
PLUS/SLS									
Number	53	46	99	60	62	122	+13.2	+34.8	+23.2
Dollars	141	113	254	157	175	332	+11.3	+54.9	+30.7
Average	2,670	2,457	2,559	2,620	2,823	2,709	-1.9	+14.9	+5.9

GUARANTEE FEES

Question: Please explain your proposal for regular Guaranteed Student Loan borrowers to be charged guarantee fees to cover default costs and other Federal program administrative costs. Is the estimate of nine percent of loan principal for such a fee for the academic year 1987-1988 based on the adoption of your other budget policies that would reduce Federal default costs such as the reduction of reinsurance payments, and if so, what would be your estimate of the guarantee fee without any other policy changes?

Answer: The Department's proposal to require borrowers to pay a guarantee fee upon receiving a regular GSL is consistent with our overall policy of requiring all participants in the GSL program (that is, borrowers, lenders, and guarantee agencies) to share the responsibility for financing the default and administrative costs of the program. Currently, the Federal Government covers almost all default costs associated with the GSL program. This is reflected in the rising reinsurance costs experienced in the program despite increased efforts to collect outstanding defaults and to reduce the incidence of default. Our estimate is based on the anticipated net default costs for the fiscal year 1988 cohort of borrowers under the President's proposed policies. Under current law, these costs would be higher and, thus, would require a marginally higher guarantee fee.

GUARANTEE AGENCIES

Question: Under the Guaranteed Student Loan program (GSL), guarantee agencies now operate in all States, and, in some instances, States are served by more than one agency, e.g., a State-level agency and a multi-State guarantor.

Are overlapping guarantee agency activities necessary now that all States have agencies and there appears to be no shortage of loan capital?

Answer: Competition among guarantee agencies across State lines is not barred by statute or regulations. A reasonable level of competition among guarantee agencies promotes efficiency in the market and benefits program participants. To interfere would be a disservice to borrowers, lenders, and schools.

Question: Is there a point where the resulting competition among agencies no longer benefits the program?

Answer: If there is a point where competition among agencies no longer benefits the program, we have yet to reach that point. The healthy competition that currently exists provides borrowers with a choice of lenders, lenders with a choice of guarantee agencies, and an abundance of student loan capital at low insurance premiums.

DEPARTMENT OVERSIGHT FUNCTION

Question: How does the Department of Education ensure that guarantee agencies perform proper oversight on loans for which the agencies or closely related organizations also operate as a lender or secondary market?

Answer: The Department uses various means to ensure that a guarantee agency properly oversees the administration of the loan program when the agency itself or a closely-related organization operates as the lender or secondary market. The Department periodically conducts reviews of agency programs to ensure compliance with program statutes and regulations. Substantial statutory and regulatory authority exists for monitoring the program, including remedial actions to protect the Federal Government. Previous reviews by the Offices of the Inspector General and by GAO have not uncovered any serious problems in this area.

REDUCING GUARANTEE AGENCY RESERVES

Question: The Administration has proposed to call back all advances from, and eliminate administrative cost allowances to, guarantee agencies under GSL. In addition to recalling advances and eliminating administrative cost allowances, what else can be done in those cases in which guarantee agencies have large reserves to reduce the continuing growth of reserves?

Answer: Another way to reduce excess agency reserves, suggested in a recent GAO study, is to withhold Department reinsurance claims until the agency has attained a satisfactory reserve level. The Department has requested that the statutory authority to do so be granted. The proposal would reduce reinsurance payments to the extent that the agency's reserves exceed the greatest of: 50 percent

of reimbursements paid to that agency during the prior fiscal year; one percent of the agency's balance of outstanding loans as of the end of the prior fiscal year; or $500,000.

GUARANTEED STUDENT LOANS/GAO

Question: The GAO in its July 1986 report (GAO/HRD-86-57) and August 1986 report (GAO/HRD-86-129BR) recommended that agency reserve limits be established. What has the Department done in response to these recommendations to establish appropriate reserve levels for each agency?

Answer: The GAO is now updating the 1986 reports on guarantee agency reserve levels. When this analysis is completed the Department will develop a plan to recover $75 million in fiscal year 1988 and $35 million in fiscal year 1989 from the 1976 advances. In the meantime the Department has developed a plan to recover all 1965 and 1968 outstanding advances (approximately $16 million) during fiscal year 1987.

FEDERAL PAYMENTS TO GUARANTEE AGENCIES

Question: How does the Department of Education verify that payments to guarantee agencies under GSL are accurate and appropriate?

Answer: The Department currently makes two types of direct payments to guarantee agencies: reinsurance claim payments and administrative cost allowances. Guarantee agencies are also permitted to retain up to 35 percent of their collections on defaulted loans.

Reinsurance claims are paid on the basis of submissions by agencies reflecting claim amounts paid to lenders at the defaulter level. Edits are performed which prevent duplicate submissions as well as data inconsistencies. Periodic audits and program reviews are performed at guarantee agency sites during which claim submissions are sampled for verification of underlying data.

Administrative cost allowances are paid on the basis of applying the statutory formula to loan volume data formally reported to the Department by agencies on a quarterly basis. To ensure accurate reporting, periodic audits and program reviews of loan volume data submitted by agencies on their quarterly reports are also performed at guarantee agency sites.

Guarantee agencies must remit to the Federal Government up to 70 percent of their collections on defaulted reinsurance loans. The purpose of agencies' being allowed to retain a portion of their collections is to cover the costs of collection. Agencies are periodically reviewed by the Department and are required to be audited biennially.

REGULATIONS REVISION

Question: How and when does the Department of Education intend to revise its regulations for GSL to conform to the Higher Education Amendments?

Answer: The Department hopes to issue the regulations shortly. Regulations will be delayed, however, by the need to incorporate technical amendments recently passed by the Congress.

SPECIAL INTEREST ALLOWANCE REDUCTION PROPOSAL

Question: Although lender groups have claimed that many lenders would drop out of the Guaranteed Student Loan program and student accessibility to GSLs would be greatly diminished if the special interest allowance were reduced, there is no evidence that this has happened when it was reduced from 3.5 percent to 3.25 percent in fiscal year 1986.

To what extent might lenders drop out of the program if the special interest allowance for GSLs was reduced to 2.75 percent in the third year of repayment?

Answer: We believe that our proposal to reduce the special allowance rate would have little, if any, impact on access to loan capital for students. While there are approximately 12,000 lenders participating in the GSL program, recent data show that only 9.3 percent of the total number of lenders in the program originate approximately 80 percent of the loans. For these high volume lenders, the GSL program would continue to be profitable. Lenders that make very few loans may find it unprofitable to continue to make GSLs. However, should these very small volume lenders drop out of the program, we believe the large volume lenders--many of whom now actively market GSLs--would assume responsibility for making loans to those students currently served by these very small volume lenders. The intent of the Guaranteed Student Loan program is to help students pay for their educational expenses, not to assure excessive profits to private lenders.

The Department's proposal to reduce the special allowance paid to lenders to 2.75 percent above the 91-day Treasury bill rate is designed to eliminate the payment of unnecessary levels of lender yield. Currently, lenders receive an excessive yield of 3.25 percent above the 91-day Treasury bill rate for the entire life of the loan, including the in-school period when the lender incurs relatively low servicing costs. For some lenders this yield is so great that they actively seek borrowers through advertising and direct mail campaigns.

The Department's proposal would reduce the special allowance rate paid to lenders to 2.75 percent above the 91-day Treasury bill rate through the second year of repayment. Beginning with the third year of repayment, the borrower's interest rate would be set by the lender, either fixed or variable, up to the 12-month 91-day Treasury bill rate plus 2.75 percent and the Federal Government would pay no special allowance. At this point--two and one-half years after leaving school--the vast majority of borrowers will be securely established in the labor force and easily able to pay back their loans at this slightly higher interest rate.

SPECIAL ALLOWANCE EFFECT ON LOAN ACCESSIBILITY

Question: Considering the large number of lenders currently participating in the program, what effect would a decrease in lender participation resulting from a decline in the special allowance to

the 2.75 percent level be likely to have on loan accessibility for students?

Answer: Again, we believe that our proposal to reduce the special allowance rate would have little, if any, impact on access to loan capital for students. Since only 9.3 percent of the lenders in the program make 80 percent of the loans, we believe that these high volume lenders would assume responsibility for making loans to those students previously served by any small volume lenders that elected to drop out of the program.

Question: Can you provide an estimate of what profits, if any, Sallie Mae and the other largest holders of GSLs would have earned in 1986 and prior years if the special allowance rate for GSLs had been set at 2.75 percent starting in the third year?

Answer: This is a very complicated question which would require extensive currently unavailable data and analyses to answer. We contacted SLMA in an attempt to obtain an estimate. However, SLMA was not able to perform the complicated analyses required before our response to you was required.

Question: What portion of the special allowance rate was needed by Sallie Mae and other large holders of GSLs to cover costs, and what portion reflects net income for 1986 and prior years?

Answer: Again, this is a very complicated question which would require extensive currently unavailable data and analyses to answer. We contacted SLMA in an attempt to obtain an estimate. However, SLMA was not able to perform the complicated analyses required before our response to you was required.

SPECIAL ALLOWANCE STRUCTURE PROPOSAL--RELATED SAVINGS

Question: How much would the Federal Government save by reducing the special interest allowance for GSLs to 2.75 percent in the third year of repayment?

Answer: Reducing the special allowance T-bill formula from 3.25 to 2.75 beginning in the third year of repayment would result in very small special allowance savings for the Federal Government. If we assume that the proposed change took effect in fiscal year 1987 for all new loans, cost savings would not begin to be realized until fiscal year 1990 (the third year of repayment). During fiscal year 1990 cost savings would be approximately $3.3 million. Beyond fiscal year 1990 there would be no special allowance costs--even at the 3.25 rate--because the projected OMB T-bill rates fall below the minimal threshold required to pay special allowance.

In contrast, the Administration's special allowance proposal would begin to produce savings much earlier. The Administration proposes to reduce the special allowance rate on all loans made after July 1, 1987 and to cease payment of special allowance on those loans once a loan enters the third year of repayment.

These proposals would assure lenders a yield of the most recent quarterly average of 91-day Treasury bill rates plus 2.75 percent, compared with the current rate which assures lenders a yield of the Treasury bill rate plus 3.25 percent. Beginning with loans made on

or after July 1, 1987, no special allowance would be paid on Consolidation Loans.

Loans made or purchased on or after July 1, 1987 using funds from qualified State obligations would no longer be eligible for increased special allowance. Also, loans made or purchased on or after July 1, 1987 from tax-exempt obligations issued between August 15, 1983 and October 17, 1986 which were not approved by the Secretary would not be eligible for special allowance payments.

These proposals, together with the proposal to eliminate the interest benefit payments, would significantly reduce Federal Government subsidy costs and unnecessary lender profits supported by the current special allowance structure. Aggressive GSL lender marketing practices in recent years, such as offers of gifts and rebates to borrowers and student aid administrators, indicate that current GSL lender yields are unnecessarily profitable.

The Department estimates that the reduction in special allowance alone would save $5 million in fiscal year 1987, $23 million in fiscal year 1988 and $32 million in fiscal year 1989.

SPECIAL ALLOWANCE PAYMENTS--1986

Question: Provide for the record data showing what portion of all special interest allowance payments for loans in the third or later year of repayment were paid to the five largest holders of GSLs in fiscal year 1986 and how much each received that year.

Answer: During fiscal year 1986 approximately $200 million in special allowance was paid to the five leading GSL holders. (Sallie Mae received approximately three-fourths of this amount.) This figure represents approximately 25 percent of the total GSL special allowance payments. The billing system does not break out special allowance payments by year of repayment. However, if we assume that 25 percent of the borrowers are in the third or later years of repayment we can conclude that approximately $50 million of the $200 million relates to special allowance payments in the third or later years of repayment.

LENDER COLLECTION STANDARDS

Question: Regarding the new standards for lenders to use in collecting Guaranteed Student Loans and filing default claims, which the Department of Education issued in November 1986, does the Department have a plan or enforcement strategy to implement the new standards?

Answer: The Guaranteed Student Loan program regulations, published on November 10, 1986, contain new standards for lenders to follow in collecting delinquent loans. These new standards will be enforced through the Department's normal review process of both guarantee agencies and lenders. In addition, the Office of the Inspector General will use a significant portion of its audit staff resources to review implementation of the new due diligence procedures.

Question: Will all lenders be held to the new standards rigidly once they go into effect, or will some transition strategies be used?

Answer: For most provisions of the November 10, 1986 regulations, the effective date was December 26, 1986. However, the new due diligence requirements for lenders was effective for loans on which the first day of delinquency occurs on or after March 10, 1987.

AUDIT GUIDES

Question: The Department of Education is required to issue audit guides to be used in audits of guarantee agencies and a sample of lenders participating in the program.

When will the guides be available?

Answer: The Department's Office of the Inspector General expects to publish an audit guide governing guarantee agencies within the next several months. An audit guide for lenders is scheduled to be published in the fall.

Question: Will these guides provide procedures for sampling loan accounts, measuring compliance against individual standards, reporting on areas of noncompliance, and estimating overpayments?

Answer: No. The audit guides will provide professional auditors with an outline of the compliance requirements that must be observed by the audited organization. The Department does not mandate the use of any particular sampling technique, preferring to leave such decisions in the capable hands of the outside experts conducting the audits. The audit community has developed industry standards and approaches in this area.

AUDIT EXCEPTIONS

Question: What type of follow-up will be required on audit exceptions to ensure that corrections are made and overpayments collected, as appropriate?

Answer: Before the Department issues a final letter of determination, the audited institution has the opportunity to review the audit and challenge its findings. The final letter instructs the institution to contact the National Finance Center (an office of the U.S. Department of Agriculture) to set up a repayment schedule. If the institution fails to contact the Center after three more demand letters are sent, the account is returned to the Department's Financial Management Service, which attempts to work with the institution to work out a mutually acceptable repayment schedule. If the institution continues to refuse to take steps to repay money owed, the Department may turn over the account to a private collection agency.

In November of last year, new regulations became effective which permit the Department to offset money owed against other payments which the Department is making to the institution. This new authority has been most useful in convincing some institutions to make restitution.

Question: How does the Department of Education plan to review and approve each guarantee agency's standards for lenders to follow in making, servicing, and collecting loans, and their procedures for paying default claims?

Answer: The Guaranteed Student Loan program regulations, published on November 10, 1986, require a guarantee agency to submit to the Secretary its regulations, statements of procedures and standards, and other materials that substantially affect the operation of the agency's program whenever changes or new materials are proposed. The agency may continue to use these materials unless and until they are disapproved by the Secretary. However, this does not apply to the agency's application form, promissory notes, and write-off criteria and procedures. These materials must be approved by the Secretary before they are used. The guarantee agency must also ensure that all program materials meet the requirements of Federal and State law.

REDESIGNED PAYMENT VERIFICATION SYSTEM

Question: The Department of Education plans in the near future to award a new contract for an automated Guaranteed Student Loan management information system.

What new controls and other changes are being incorporated in the contract to ensure that lenders are accurately billing the Department for interest and special interest allowance payments, and to identify errors in these billings?

Answer: Requirements for a redesign are being included in the proposed new contract. Some of the features of the new contract relating to payment verification are the following:

-- Additional data will be required involving loan sales and purchases by lenders in order to improve our ability to edit loan portfolio balances against previous periods.

-- Reporting of loan portfolio balances will be segregated by loan program, i.e., regular GSL, Supplemental Loans, PLUS, FISL, and Consolidation Loans.

-- The edit test for billing reasonability will take into account such data as loan sales, purchases, collections from borrowers, and claims activity.

-- Master file records will be expanded to record the names of all guarantors with which a specific lender participates, allowing the Department to solicit assistance from guarantors in training lenders, providing technical assistance, and in validating billing.

-- Master file records will be expanded to include any servicing agents used by lenders. This will allow the Department to provide feedback to lenders in cases where servicers are making errors.

Question: How will these controls and changes be coordinated with the results of guarantee agency and lender audits?

Answer: Information derived from the interest and special allowance payment system will be used to identify problems with specific guarantee agencies or lenders earlier in the processing cycle and enable us to focus audits on these problems better. Data

from the redesigned payment system will also enable us to confirm the results of audit findings, thereby supplementing the information obtained from audits on guarantee agencies and lenders.

FEDERAL INCOME TAX REFUND OFFSET PROGRAM

Question: The Deficit Reduction Act of 1984 allowed the IRS to collect delinquent debts owed the Government by offsettng the amount against a debtor's Federal tax refund. This authority was for the 1985 and 1986 tax years and has not been reauthorized. The participation by guarantee agencies in the offset program is voluntary, and 46 participated in the first year (50 in the second year) offsetting approximately $36 million through September 1986.

Although guarantee agency participation was voluntary, does the Department propose to take any action to encourage full participation if the program is reauthorized?

Answer: The Department does not now plan to require full participation in the Federal Income Tax Refund Offset program. For fiscal year 1987, the second and final year currently authorized to use the Internal Revenue Service to offset refunds of delinquent borrowers, 50 out of a total of 58 guarantee agencies agreed to participate in the program. We expect the eight currently non-participating guarantee agencies to participate if the legislative authority to use the tax refund offset program is extended.

GUARANTEE AGENCY REINSURANCE REQUIREMENTS

Question: The Consolidated Omnibus Budget Reconciliation Act of 1985 made several changes to the program. The Act extends the time-frame that loans must be held by agencies and lenders before reinsurance can be collected, allowing them to further try and get the borrower into repayment before a default claim is filed.

Will the Department of Education propose specific steps for the guarantee agencies to follow to get the borrower into repayment during this extended timeframe, and if not, how will the Department monitor the use or non-use of this technique?

Answer: The GSL regulations published November 10, 1986 incorporated the provisions of the Consolidated Omnibus Budget Reconciliation Act of 1985. The statute requires that before a default claim may be filed by a lender, a loan must be delinquent 180 days if repayable in monthly installments, or 240 days if repayable in longer installments. The regulations require guarantee agencies, as conditions of reinsurance coverage: to pay a default claim only if the lender filed the claim within 90 days of default; to pay the lender's claim within 90 days of the date the lender filed the claim; and to submit a request for reinsurance payment to the Secretary no earlier than 90 days following default. These requirements promote efficient program management, thus assuring sufficient time in which interested parties can be alerted to a default and all efforts to return the borrower to repayment status can be made. The regulations also provide due diligence procedures for lenders and guarantee agencies to follow in the collection of loans. This includes a description of collection activities to be performed during specific periods of time. Periodic reviews of agency and lenders programs by the Department will ensure compliance with these provisions.

REAUTHORIZATION GARNISHMENT PROVISIONS

Question: The Higher Education Amendments of 1986 reauthorized the Guaranteed Student Loan program and extended it through 1991. This new law made several changes that affect default prevention and collection. One of these changes allows a guarantee agency to retain up to 35 percent of any default collections to cover its expenses as long as the agency has a garnishment law that complies with the provisions of the amendments (in those cases when an agency does not have such a garnishment law, it can retain only 30 percent). How many guarantee agencies currently comply with the garnishment provisions as cited in reauthorization?

Answer: It is the Department's understanding that currently only Pennsylvania has a law which complies with the garnishment provisions of Section 428E, as amended by the Higher Education Technical Amendments Act of 1987. Other agencies are now taking steps to qualify for the 35 percent retention allowance. However, the Department is concerned that the State garnishment provision is very restrictive, thus preventing agencies from meeting its requirements.

The Department therefore is proposing to repeal the State garnishment provision in conjunction with our proposal to restore the collections retention allowance to 30 percent of the amounts collected or the cost of collections, whichever is less. Guarantee agencies would still be able to establish effective garnishment programs as part of their overall collection efforts and would benefit from increased collection revenues.

Question: Does the provision that allows a guarantee agency to keep 35 percent of collections apply to all collections, or only those where a garnishment is actually used?

Answer: The provision which allows agencies to retain 35 percent of collections applies to all collections made by agencies which meet the statutory requirements concerning the existence of a garnishment authority within that State.

FEDERAL INSURANCE FEE PROPOSAL AND DEFAULTS

Question: The Administration's proposal to substitute Federal insurance fees (designed to cover the future costs of loan defaults) for origination fees (intended to reduce interest subsidies) is significant. It would almost double the amount of loan proceeds withheld from students' awards, while removing the Department of Education from its traditional role as an insurer of student loans by shifting the costs of that burden to program borrowers.

The Administration's proposal to impose a nine percent insurance fee on Guaranteed Student Loan borrowers is apparently being advanced without study of the potential impact on debt burdens and defaults. Because the fee is deducted from the loan proceeds, it could contribute to borrowers' need to seek additional loans to make up the shortfall.

Are there any studies available which would indicate the potential impact of increasing debt levels on borrowers' ability to

repay, and thus on loan defaults, and if not, does the Department plan to study the matter?

Answer: Numerous studies of student loan borrowers have concluded that the more a student borrows, the less likely he or she is to default. The accepted explanation is that those borrowers with low debt levels default because they did not complete their courses of study or they received inadequate instruction; thus they are burdened with their student loan debts, but have not increased their employment opportunities. Borrowers with high loan balances tend to enter higher paying occupations, and, therefore, are less likely to default. Borrowers who pay a nine percent guarantee fee would pay only marginally more front end costs than borrowers pay today (that is, a five percent origination fee and an insurance premium that varies from guarantee agency to guarantee agency). The Department remains committed to monitoring the effects of increased debt burden and to studying loan defaults and their prevention.

CALCULATION OF FEDERAL INSURANCE FEE

Question: The nine percent insurance fee rate on Guaranteed Student Loans reflects the Administration's estimate of the present value of future defaults on new loans.

Could you summarize and then provide for the record the assumptions the Department used and how it calculated the rate?

Answer: The nine percent guarantee fee is derived by calculating the present value of the Federal administrative and default costs associated with an annual cohort of regular GSL loans. Administrative costs are estimated to be $1.20 per thousand dollars in outstanding volume, plus one percent of volume (for administrative cost allowances). Default costs were estimated according to the established pattern of defaults, which is that 9.15 percent of a given cohort of regular loans will default and that about 28 percent of defaults of a cohort of loans occur in the third year after the loan is made. That rate drops to about ten percent in year six and declines precipitously thereafter. Once the nominal costs are determined they are discounted to their present value, using the Office of Management and Budget's December 1986 economic projections of long-term bond rates, which are projected to decline from 6.6 percent in 1988 to 4.5 percent by 2001.

Question: Does the Administration view this as a fixed nine percent rate, or as a rate which would vary with experience?

Answer: The guarantee fee would vary with experience. It would be recalculated annually.

DEPARTMENT OVERSIGHT FUNCTION

Question: The Department of Education's program reviews are conducted with a very small staff and they are not able to provide much coverage. For example, during fiscal year 1986, the Department of Education visited about 400 of the 13,000 lenders in the Guaranteed Student Loan program to conduct program reviews.

How many program reviews did the Department perform at guarantee agencies and institutions of higher education during fiscal year 1986?

Answer: The Department conducted 10 guarantee agency reviews and 417 institutional reviews during fiscal year 1986.

Question: What was the average length in days per site visit?

Answer: The average length in days per site visit was 3.5 days.

AUDIT EXCEPTIONS

Question: How many exceptions (number and dollar amounts) were made as a result of the program reviews in fiscal year 1986?

Answer: The number of deficiencies (exceptions) found totaled 5,113. The total amount of liability was $2,505,485.

Question: How many overpayments?

Answer: We define "overpayment" as an amount which exceeds the proper amount the student was entitled to receive from the Title IV program(s). Therefore, it is difficult to provide specific information on overpayments because our assessment of liabilities includes errors in program administration, as well as program overpayments for students.

OSFA REORGANIZATION--IMPACT ON REVIEW FUNCTION

Question: The Department of Education recently restructured its staff which reviews student aid programs. The impact on number, scope, and quality of reviews has not been determined. What was the purpose of the restructuring?

Answer: In March 1987 the Office of Student Financial Assistance (OSFA) modified its regional office structure and reallocated both regional and headquarters resources.

The major elements of the reorganization are as follows:

(1) GSL function. Because the new GSL regulations place primary responsibility for lender review with guarantee agencies, regional office staff will perform fewer lender reviews, concentrating instead on overseeing and monitoring the lender and school reviews performed by guarantee agencies, reviewing the agencies, and monitoring the largest volume schools and lenders.

(2) Institutional review function. This function continues to be a priority of the Department and is largely unaffected by the restructuring.

(3) Training function. The training function is being concentrated in headquarters, to be complemented by contractor-developed training and greater participation by financial aid administrators and guarantee agencies in the delivery of training. We will retain one training officer in each regional office to deliver headquarters-developed training and to provide information and

assistance to the community in coordinating the training function in that region.

(4) Regional office coordination. Finally, in order to improve communications and coordination of the student assistance programs between headquarters and the regional offices, we have established a Division of Field Operations headquartered in Washington. All regional staff have been assigned to this Division.

We believe the organizational changes we have made in both the regions and headquarters will: provide a more effective and responsive structure; improve communication links between Washington, the regional offices, and the community; reduce OSFA's overhead costs; and enable OSFA to focus on current operational, legislatively-mandated, and management-directed priorities.

The regional offices are an essential part of the Department's administration of the student assistance programs, and they will continue to be the first line of contact with the financial aid community. However, our highest priorities continue to be those that directly affect the delivery of the programs, e.g., issuing implementing regulations and policy guidance; awarding, paying, and accounting for funds; providing operational assistance to recipients and our various constituent groups; and administering the major contracts which support program delivery. These functions are best performed at headquarters, i.e., Washington. It would be less effective, more time-consuming, and more costly to perform these functions in each of the ten regional offices.

OPE ON-SITE REVIEWS--1984-1987

Question: How many staff days will be spent for on-site review in fiscal year 1987 compared to fiscal years 1984, 1985, and 1986?

Answer: OPE does not maintain records on the number of "staff days" spent for on-site reviews. The Office of Postsecondary Education staff have conducted the following number of site visits (these figures do not include site visits by the Office of the Inspector General):

OPE Conducted Institutional Reviews		OPE Conducted Lender/Guarantee Agency Reviews	
Fiscal Year	Reviews Conducted	Fiscal Year	Reviews Conducted
1984	721	1984	773
1985	763	1985	685
1986	417	1986	473
1987	543*	1987	361*

* Fiscal year 1987 figures are based on actual number of reviews conducted to date and estimated number for remainder of fiscal year.

COORDINATION BETWEEN PROGRAM AND IG REVIEW STAFF

Question: With the Department of Education's Inspector General and its own program review staff both conducting reviews of the Guaranteed Student Loan program, the issue of possible audit duplication comes up.

What is the relationship between the program review staff and the Office of the Inspector General?

Answer: The Office of the Inspector General may investigate particular areas of concern which it targets for its reviews. If these areas reveal problems of a program nature which the Inspector General perceives to be better addressed by the program review staff, the Office of the Inspector General will contact the Office of Post-secondary Education (OPE) and request that it assist in the review or conduct of a separate site review. Therefore, the relationship between OPE and the Office of the Inspector General is one of coordination. Also, the Office of the Inspector General designates specific areas that it will review which may not encompass the entire Guaranteed Student Loan (GSL) program. These are known as limited scope reviews. OPE, however, must review the entire scope of the GSL program when conducting a site review.

Question: Does each group use the work and follow-up on the findings of the other?

Answer: The Office of the Inspector General prepares an annual work plan which includes areas it wishes to review. The work plan is shared with OPE in order to avoid possible duplication. Also, OPE is asked to give input into the work plan. Therefore, the work plan can be used to follow-up areas of concern when reviewing the GSL program, as well as referring to the Inspector General's office particular concerns found during an on-site review.

DEBT COLLECTION

Question: Please assess the cost-effectiveness of debt collection activities conducted by agency personnel versus outside contractors. Include the salary costs for agency personnel when estimating their cost-effectiveness ratio.

Answer: In general, the Department believes that the combination of contract collectors and a relatively small Federal staff performing necessary preliminary work has been very effective. However, an assessment of the cost-effectiveness of the student loan debt collection activities conducted by agency personnel versus outside contractors is presently underway. The design phase of the study will last approximately one year with results expected to be reported in August 1988.

TRAINING FINANCIAL AID ADMINISTRATORS

Question: Why will it cost $2 million to train financial aid administrators to implement the Higher Education Act amendments?

Answer: The Department will use the $2 million to fund a full-scale effort to train the non-Federal financial aid administrators. Training programs of this magnitude have not been possible

in recent years due to budget constraints, but the Department believes it is particularly important to provide this training in light of many new statutory and regulatory requirements. The Department relies on these non-Federal administrators to operate the $8-$9 billion student aid programs. The training will help prevent fraud, abuse, and errors at a small fraction of the program's cost.

The training will improve the ability of institutional financial aid officers to administer the Title IV programs. The training will concentrate on the significant changes resulting from Higher Education Act reauthorization. Training for lenders and proprietary institutions will not be financied from these amounts.

Question: What type of training is envisioned?

The following chart shows the training audiences as well as types of costs for that training:

FY 1988 Budget For Training Non-Federal Student Aid Administrators
($ in thousands)

	TYPES OF TRAINING AUDIENCES				
TRAINING COSTS	AID ADMIN.	INSTIT. ADMIN.	FISCAL OFFICERS	COUNSELORS	TOTAL
Materials Development and Production....	$150.0	$150.0	$150.0	$150.0	$600.0
Training and Trainers a) Travel.....	8.0	4.0	4.0	4.0	20.0
Field Training a) Travel.....	320.0	200.0	100.0	70.0	690.0
b) Space.....	26.0	32.5	16.3	11.4	86.2
Regional and Central Office Staff-Training Monitoring (Travel & Per Diem).....	21.2	10.6	10.6	10.6	53.0
Other Administrative Costs (Contractor Office space, etc.).	160.0	80.0	80.0	80.0	400.0
Evaluation of Training.....	37.7	37.7	37.7	37.7	150.8
Subtotal.....	722.9	514.8	398.6	363.7	2,000.0

ADVISORY COUNCIL TERMINATION

Question: Why do you propose to terminate the newly authorized Advisory Committee on Student Financial Assistance?

Answer: The Committee's functions are primarily that of providing technical expertise regarding the system of needs analysis under the Higher Education Act, data collection needs, and the

effectiveness of student aid delivery. The Advisory Committee on Student Financial Assistance is not needed because the necessary expertise can be achieved more effectively and efficiently through use of existing means such as consultants, experts and in-house review.

Question: The General Education Provisions Act permits the Secretary to terminate several advisory councils "unless there is an objection by either House or Senate within 90 days." What action has the Department interpreted to signify an objection by one of the two Houses?

Answer: The Department interprets that language to mean any action that is consistent with the Supreme Court decision, Immigration and Naturalization Service v. Chadha, 462 U.S. 919 (1983).

Question: How much additional funding would the Department need if its proposals to eliminate several advisory councils and student financial aid reports were not accepted?

Answer: Depending on funding levels for individual items, which are largely discretionary in nature and magnitude, from $3-$13 million more would be needed to fund all of the new activities authorized in the Higher Education Amendments.

STAFF ATTRITION AND RECRUITMENT

Question: The Department's FTE usage as of the end of February was actually below the end of FY 1986 level. What steps are you taking to increase recruitment and reduce attrition?

Answer: The actual on-board FTE at the end of 1986 was only 10 FTE higher than the on-board FTE for April 1987. This comparison shows that the Department's FTE remains relatively level with its on-board FTE at the beginning of the year and is now overtaking its earlier attrition rate with net monthly gains.

The Department's earlier attrition rate was unusually high during the first half of this fiscal year because of a large number of retirements. Since December, the on-board FTE level has steadily increased through the hiring of career interns, clericals, and other professionals to fill critical vacancies. On-board FTE levels have risen in recent months by 30 to 50 FTE, so the ceiling level should be reached soon. Plans are also underway to hire up to 80 additional employees under the career intern program in August.

Question: Do you expect to fall short of your FY 1987 FTE ceiling?

Answer: The Department does not expect to use all of its 4,500 FTE during 1987. However, in actual on-board staff, we do expect to reach an annualized level of 4,500 FTE before the end of this year. Thus, the Department will enter fiscal year 1988 with a full complement of staff. Additional hiring will occur in 1988 to replace employees leaving through regular attrition.

OCR STAFFING PATTERN

Question: The number of FTEs in the Office for Civil Rights has dropped by 37 from the beginning of FY 1987 through February. Is it likely that OCR will be able to meet its FTE ceiling by FY 1988, given this pattern?

Answer: OCR's rate of attrition is decreasing as its hiring pattern increases. OCR is expected to approach its 1988 ceiling of 820 FTE by the end of this fiscal year, and it is likely to use 820 FTE during 1988.

Question: What impact will this reduced staffing have on the number of compliance reviews conducted and the amount of time to resolve complaints?

Answer: OCR's current staffing pattern is increasing, while its estimate of the number of complaints to be received for 1987 has now fallen below 2,000--almost 700 below the number received in 1986--and well below projections of 2,200 complaints used for presenting the budget. The anticipated staff size for FY 1988, therefore, will have no adverse effect on compliance reviews or complaint resolutions.

Question: From where will the FTE reduction be made?

Answer: The FY 1988 budget request proposes 820 FTE for the Office for Civil Rights, a decrease of 20 FTE below FY 1987. Since the on-board staff as of April 25, 1987, was already at 800 FTE, no actual reductions in staff will be necessary. The estimated FTE usage for OCR for 1987 is 805 FTE; therefore, the 820 FTE requested in the 1988 budget will actually be an increase of 15 FTE above the 1987 usage level.

STAFFING LEVEL TO CONTINUE CURRENT SERVICES

Question: How much added funding and staff would be needed in 1988 to operate all programs funded in 1987 at current services levels?

Answer: The 1988 President's budget request for Salaries and Expenses would enable the Department to operate all programs if funded at the current services level.

CORRECTIVE ACCOUNTING ACTIONS

Question: Please describe the steps you have taken to correct past-year accounting for funds incorrectly recorded as unliquidated obligations.

Answer: The steps the Department has taken to correct past years' accounting records include: (1) implementation of a grants payment system which provided easy access to a data base of identifiable unpaid items; (2) identification of unpaid items which seemed unreasonably high, followed by confirmation with individual recipients that these balances were not owed; (3) write-off of balances thus identified; (4) comparison of the remaining unpaid balances with cash in ED's Treasury account for unexpired funds; and

(5) write-off of the differences identified by this comparison. To help ensure that this problem does not occur in the future, we designed software which will close expired grant awards on an automated basis.

Question: How much funding has been written off to date, and how much more do you expect to deobligate in 1987 and 1988?

Answer: We estimate that the total amount written off will reach $1.8 billion in 1987, and we expect another $200 million in 1988. No recipient of ED funds will be affected by this accounting action. They have received and used all funds. The write-off will merely correct accounting records.

SECRETARY'S TRAVEL

Question: Did the Office of the Secretary use travel funds allocated to other offices in 1986? Are there plans to do so in 1987 and 1988?

Answer: No. The Office of the Secretary did not use travel funds allocated to other offices in 1986, nor does it plan to in 1987 or 1988.

OCR FUNDING FLOOR

Question: In the consolidated appropriation request for salaries and expenses, why is there no funding floor for the Office for Civil Rights, as there is for the Inspector General? Shouldn't the Office for Civil Rights be afforded the same protection?

Answer: The Inspector General alone is afforded a funding floor in technical recognition of its need for independence within the Department. This independence is necessary because the Inspector General may need to audit or investigate Department officials involved in budget decisions. The Assistant Secretary and the functions.

COMMITMENT TO CIVIL RIGHTS ENFORCEMENT

Question: Mr. Secretary, this Subcommittee has been concerned for several years about what appear to be serious problems in the Department's enforcement of civil rights compliance. While I am hopeful that your recent nomination of an Assistant Secretary for Civil Rights may restore some sense of direction to this beleaguered agency, the record presents some pretty disturbing evidence. Just a few examples:

-- The recently disclosed scandal of backdating documents to fake compliance with court-ordered processing deadlines;

-- A 25 percent reduction in Department civil rights staff between 1981 and your proposed 1988 level;

-- According to your budget documents, a projected increase in pending complaints from 1987 to 1988;

-- Consistent lapsing of unused Office for Civil Rights funds;

-- A 32 percent drop in compliance reviews from 1983 to 1986.

How can we conclude anything other than that the Department has no serious commitment to civil rights enforcement?

Answer: The Department of Education is committed to enforcing vigorously the civil rights laws. Although the OCR staff has been reduced by 26.9 percent since FY 1981 and some funds (not requested by the Department but appropriated) have lapsed, the number of civil rights complaints pending at the end of FY 1986 was 13 percent less than at the end of FY 1985. The average age of pending complaints at the end of FY 1986 was 174 days compared with 586 days at the end of FY 1982 --a 70 percent drop. In FY 1986 there was a drop in compliance reviews; however, the figures exclude 254 on-site higher education desegregation monitoring visits. Further, the number of compliance reviews has gone up recently.

The document-dating discrepancies are to be condemned, but it should be noted that no one's civil rights were abridged or curtailed. The discrepancies did not change the outcome of a single case. Furthermore, even if all the record discrepancies resulted in missed Adams due dates, OCR would still be in compliance with the Adams court order that requires OCR to meet the due dates on 80 percent of all cases. In short, OCR is enforcing the civil rights laws in the most timely manner ever.

LAPSED OCR FUNDS

Question: Please identify the amount of OCR funding that has lapsed each year 1981-86.

Answer: The information follows:

FY	Amount of Lapsed Funds
1981	$1,121,000
1982	832,000
1983	1,468,000
1984	2,694,000
1985	2,448,000
1986	2,569,000

Question: Why didn't the Department reallocate its internal personnel ceilings so that these lapsed funds could have been used to support OCR's mission?

Answer: There was no need to reallocate internal personnel ceilings since OCR's personnel resources were adequate and OCR was accomplishing its mission effectively.

GROVE CITY LEGISLATION IMPACT

Question: If the Grove City legislation that has been introduced this session passes, what impact do you expect it to have on your FY 1988 staffing needs?

Answer: None. Only a little over 3 percent of the complaints filed with OCR during fiscal years 1984, 1985, and 1986 were closed or narrowed due to Grove City. Currently, a considerable

amount of staff time is spent making jurisdictional determinations. If the Grove City legislation supported by the Administration (H.R. 1881) were to pass, less staff time would be required to make jurisdictional determinations. Staff time, then, could be used to conduct whatever additional investigations might be required by new legislation.

HIGHER EDUCATION DESEGREGATION - EVALUATION

Question: We understand that the Department has distributed for comment reports on State implementation of higher education desegregation plans for the 10 States whose plans expired in academic year 1985-86. When will evaluation letters be sent to these States?

Answer: A specific date has not been set. The comment period ends on June 8, 1987, after which the Department will consider the comments received from the public and the States. Since the situation in each State is unique and the plans complex, it may take some time to prepare final evaluations. In the meantime, the States are continuing their desegregation efforts, where necessary, and the Office for Civil Rights continues its enforcement activities.

Question: What type of action could be required if States are found not to have complied with plan requirements?

Answer: If, after reviewing the total situation in a State, it was found not to be in compliance with Title VI, the Office for Civil Rights (OCR) would have two alternatives. OCR could enter into negotiations with the State to establish a new desegregation plan designed to bring it into compliance in those areas where it was found to be violating Title VI. Alternatively, OCR could initiate enforcement proceedings, either by referring the matter to the Department of Justice or by starting administrative proceedings to terminate Federal education funds going to the State system of higher education (or those parts found in violation of Title VI).

COMPLIANCE REVIEW STATUS

Question: Why has there been such a significant drop in compliance reviews (a 32% decrease from FY 1983 to FY 1986)? Doesn't this indicate a need for more staff, so that the Department can fulfill its responsibilities for compliance reviews, as well as for complaint investigation?

Answer: During FY 1986, OCR conducted 254 on-site monitoring reviews at higher education institutions in 10 States whose statewide higher education desegregations plans expired. If this number is added to the 196 compliance reviews otherwise conducted, the total is 450 reviews, a 57 percent increase from 1983.

The 1977 Adams court order requires that OCR conduct "an appropriate number of compliance reviews." (Adams v. Bennett, paragraph 18, Civ. No. 3095-7, December 29, 1977). The Department fulfilled its responsibilities for compliance reviews in FY 1986 and will continue to do so.

OCR COMPLAINTS ON-HAND

Question: Why do you expect an increase in complaints on hand at the end of the year from FY 1986 through FY 1988?

Answer: The "increase" projected was negligible and actually reflects the expectation that closures each year will remain close to the number of new complaints received.

Question: In what percentage of complaint investigations is the Department meeting the Adams court order processing deadlines?

Answer: The rate of case compliance with the Adams order for any given year is constantly changing as more investigated cases are finally brought to completion. The compliance rate through September 30, 1986, for complaints received during FY 1983 was 88 percent; for compliance reviews initiated during FY 1983, 62 percent; and for these complaints and compliance reviews combined, 85 percent.

The compliance rate through September 30, 1986, for complaints received during FY 1984 was 89 percent; for compliance reviews initiated during FY 1984, 58 percent; and for these complaints and compliance reviews combined, 86 percent.

The compliance rate through September 30, 1986, for complaints received during FY 1985 was 94 percent; for compliance reviews initiated during FY 1985, 89 percent; and for these complaints and compliance reviews combined, 94 percent.

The compliance rate through September 30, 1986, for complaints received during FY 1986 was 99 percent; for compliance reviews initiated during FY 1986, 83 percent; and for those complaints and compliance reviews combined, 98 percent.

Question: What is the average number of days taken to issue a letter of findings? To take corrective action?

Answer: During FY 1986, the average number of calendar days from receipt of a complete complaint to issuance of a Letter of Findings (LOF) was 205 days. Corrective action plans are most often obtained prior to issuance of the LOF. In those cases where violations are found, negotiations begin as soon as the investigative report has been completed. During FY 1986, LOFs citing no violations averaged 197 days and LOFs citing violations for which OCR had negotiated corrective action averaged 208 days.

COLLEGE HEALTH INSURANCE COMPLAINTS

Question: Please provide more detail on the 500 complaints related to college health insurance coverage in FY 1986, and the reason this workload is not expected to recur.

Answer: The complaints were filed by one individual who alleged that the institutions violated Title IX by not providing the coverage for pregnancy and pregnancy-related disabilities in the same manner as other temporary disabilities. There is no

evidence which indicates that the complainant had any intention of applying to any of the institutions against which he filed complaints.

A plurality of the complaint forms submitted by the complainant specifically cite sections 106.40(a) and 106.40(b)(4) of the Title IX regulations. Some of the complaints also request that the investigation "ensure that elective abortion is covered." Many of the complaints were accompanied by the institution's brochure of the student health insurance plan. The pregnancy and pregnancy-related provisions of the plans were circled and the complaints highlighted any disparities between abortion benefits and other disability benefits.

During the past two years, OCR has received 695 complaints concerning institutional student health insurance plans. Of this number, 692 have been closed, 488 of which were closed due to a lack of jurisdiction. Approximately five of the "no jurisdiction" responses were due to the granting of a religious exemption. Of the remaining 204 cases, 19 complaints were closed administratively, 16 were closed with no change necessary for the recipient's health insurance plan, and 169 were closed when a voluntary agreement was reached between OCR and the institution involved.

The workload which resulted from these health insurance cases is not expected to recur. In contrast to FY 1986, the current fiscal year has seen a dramatic decline in the number of complaints filed against institutions' health insurance plans. During the past several months, some of the regions have reported that no complaints have been filed against any institution's insurance plan.

Question: Why do you assume the number of complaints received will remain constant from FY 1987 to FY 1988, when the rate of growth between FY 1984 and FY 1985 was almost 16 percent (the most recent trend data not distorted by the receipt of the atypical health insurance coverage complaints)?

Answer: If the single complainant health insurance coverage cases are factored out, OCR experienced a minor increase (3 percent) in complaint receipts between FY 1985 and FY 1986. During the first half of FY 1987, OCR received 898 complaints. This is substantially lower than one-half of the 2,200 complaint receipts projected for FY 1987, so it is likely that FY 1987 receipts will actually decrease from prior years. Projections were used solely for budget presentation purposes and assumed a relatively stable level of new workload.

OCR STAFF ATTRITION

Question: Why has there been such high attrition among OCR staff?

Answer: From 1981 through 1987 to date, the Department of Education has experienced a 41.5 percent reduction in staff. OCR, in comparison, has experienced a 26.9 percent reduction in staff for this same time period. Still, OCR is concerned about its attrition rate. One factor which has contributed to this high rate is the large number (32) of OCR employees who elected to retire during the period August 1, 1986, to January 2, 1987. In addition,

OCR has experienced a large turnover in clerical staff as has the rest of the Department.

COMPLIANCE REVIEW SELECTION PROCEDURE

Question: Provide an estimate of the additional compliance reviews the Department could have completed by using the OCR funds that lapsed at the end of FY 1986.

Answer: Compliance reviews are initiated when OCR determines there is reason to believe that a school, school system, college or university may not be in compliance with one or more of the four civil rights laws. This information comes from a variety of sources, such as: survey data, information on complaints against an institution or school system, information available from State and local agencies, professional organizations, interested groups and media reports. Therefore, the decision to initiate a compliance review is not primarily determined by the availability or lack of funds. Additional funds in a particular fiscal year would not necessarily increase the number of compliance reviews initiated.

Question: Please describe the Department's methodology for selecting institutions for compliance reviews. Do you have a long-range planning cycle so that institutions are viewed on a regular basis, or do you rely on a high-risk targeting approach? Does this meet commonly accepted sampling standards, such as those used by the Inspector General and the General Accounting Office?

Answer: Compliance review sites are selected purposively based on targeting criteria stated above. A number of indicators are used by regional staff to identify potential sites, and the Regional Civil Rights Directors approve the nominations for their respective areas.

While this process does not involve a long-range planning cycle that results in institutions being reviewed on a regular basis, the regional offices consider the compliance history of a particular institution, including any complaint and compliance reviews conducted recently at the institution. The sampling methodoly and standards utilized are commonly recognized as valid.

Question: What percent of affected institutions do you review each year?

Answer: OCR annually initiates compliance reviews that affect approximately 1.25 percent of the universe of almost 20,000 elementary, secondary and postsecondary institutions in this country. While the percentage seems small, all institutions do not necessarily receive Federal funds and, therefore, are not subject to compliance review. Only after an institution is selected for compliance review can OCR determine whether the institution receives Federal funds.

OCR began 287 compliance reviews in FY 1983, 220 in FY 1984, 289 in FY 1985, and 196 in FY 1986. Of the 196 starts in FY 1986, 120 were elementary and secondary reviews and 76 were postsecondary reviews.

Questions Submitted by Senator Quentin N. Burdick

STUDENT FINANCIAL AID

STUDENT FINANCIAL AID LOANS

Question: How many students currently receiving loans will be ineligible under your new proposal?

Answer: No students currently receiving loans will be ineligible for student loans under our fiscal year 1988 proposals. Although a student will become ineligible for a regular Guaranteed Student Loan, that student may still qualify for a loan under the Supplemental Loans for Students (SLS) program. Indeed, under our proposals, any student could borrow without any limit other than the cost of education. In addition, the total Perkins and Income Contingent Loan funds available to students will increase from $879 million in 1987 to $1.4 billion in 1988 under our proposals.

STUDENT FINANCIAL AID POLICY

Question: The Administration's budgetary proposals reverse the Federal Government's role related to student aid--a role that was achieved through reauthorization of the Title IV programs and passage of the Higher Education Amendments Act of 1986 which was signed by the President in the fall of 1986.

Based on what well thought out plan, do you suggest disregarding the Federal role that has been established to help students participate in postsecondary education?

Answer: The Department's fiscal year 1988 budget request does not disregard the Federal role to help students attend postsecondary education. However, the kind and amount of assistance needs to be evaluated. We believe that our fiscal year 1988 budget request restores the proper Federal role in the financing of postsecondary education. The request emphasizes the importance of access to education and educational choice, particularly for needy students, by increasing the availability of unsubsidized loans. The Income Contingent Loan program would be expanded so that more needy students could benefit from long-term, flexible repayment conditions. Student grant aid would be restricted to the neediest students, under the more tightly focused Pell Grant program.

In addition, the Supplemental Loans for Students program would make loans available to all students, regardless of need, and would expand the student's flexibility in the choice of an institution.

STUDENT FINANCIAL AID VERSUS TUITION COSTS

Question: The budget document seems to suggest that excess available student aid contributes to increases in costs of higher education. However, the National Commission on Student Financial Assistance, a congressional study commission, found no evidence that colleges increase their costs to take advantage of student ability to pay for those costs through Federal financial aid. On what information are you basing your assertions that there is a positive correlation between the amount of student aid and college costs?

Answer: While the availability of Federal student aid is not the only reason institutions raise their costs, we believe that it is an important factor because it constitutes a major subsidy of higher education that insulates institutions from normal market forces of supply and demand. Corroboration of this analysis of the role of Federal aid is provided by an important study done by the National Commission on Student Financial Assistance entitled, "The Impact of Federal Student Financial Assistance on Tuitions, Institutional Student Aid and Alumni Giving" by Nathan Dickmeyer. In general, Mr. Dickmeyer found that student aid increases are clearly associated with tuition increases as well as with growth in administrative overhead. Surveying 388 colleges, he concluded, "the most likely chain of events...is that increases to Federal programs made students less resistant to tuition increases."

STUDENT AID PROPOSALS--IMPACT ON ENROLLMENT

Question: Individuals associated with higher education in North Dakota, and thus close to the potential problems associated with your proposed changes in student loan programs, perceive the likelihood of a significant impact on enrollments. Access to student loans is especially important now, in North Dakota, since major State budgetary problems are serving as a catalyst for projected 18 percent tuition increase.

How do you think college enrollments will be affected when students find out that they are ineligible for loans?

Answer: The Department's fiscal year 1988 budget request for Federal student assistance does not propose tightening the eligibility criteria for student loans. In fact our request would provide additional access to loan capital by repealing the loan limits for students borrowing under the Supplemental Loans for Students and PLUS programs. Borrowing would be limited to the cost of attendance minus estimated financial assistance plus amounts needed to pay interest accruing during periods of deferment. In addition, eligibility for Supplemental Loans would be extended to include all otherwise eligible students (both dependent and independent, undergraduate and graduate) and the spouses of such students. Therefore, we believe that if enacted, our fiscal year 1988 budget request will not affect college enrollments.

FARM FAMILIES - LOANS

Question: Staff associated with higher education in North Dakota have indicated that many farm families will become ineligible for need based loan programs because of their farm assets. Even with their assets, these families simply do not have the cash flow to pay for their children's education, especially with the economic conditions they are currently facing. What recourse to you believe these families have?

Answer: The need analysis used to determine eligibility for federally subsidized student loans protects a percentage of farm and business assets from being assessed as income and counted toward the family's parental contribution. For farm families

forced to sell their farms due to bankruptcy, foreclosure, liquidation, or forfeiture, the income of such sale is not counted in determining the family's ability to pay for postsecondary education.

If students from farm families are not eligible for regular Guaranteed Student Loans, they can still have access to unsubsidized loans under the Supplemental Loans for Students and PLUS programs. These programs currently provide up to $20,000 of loan capital for financing postsecondary education. If enacted, our fiscal year 1988 budget request would provide even more loan capital by liberalizing very substantially the loan and eligibility limits in these two programs.

POLICY IMPLICATIONS ON LOW-INCOME FAMILIES

Question: You suggest that low-income students would not be adversely affected by the Administration's proposals. However, the SEOG and SSIG grant program funds would be completely eliminated. How can low-income students avoid being adversely affected?

Answer: The Department's fiscal year 1988 budget does not request funds for the Supplemental Educational Opportunity Grant (SEOG) and the State Student Incentive Grant (SSIG) programs. Currently, Supplemental Grants are not well focused on low-income students. This is confirmed by a recent study by the General Accounting Office (GAO) which found that all types of institutions (public, private, historically Black, and proprietary) do not target SEOG funds to lower income students. Therefore, Federal funding should be directed to programs which clearly do focus on low-income students like the Pell Grant program.

Funding is also not requested for the SSIG program because all States now support need-based aid programs. In academic year 1984-85, of the 40 jurisdictions which overmatched Federal funds, 30 provided at least 75 percent more need-based grant aid than was required to match Federal funds. Furthermore, State expenditures for grant aid continued to expand even as Federal funding dropped or remained level.

SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANTS

Question: Many students who lose SEOG awards are enrolled in institutions where replacement loans from the new Income Contingent Loan program are inaccessible. How do you envision remediating that problem?

Answer: Under the Department's proposed expansion of the Income Contingent Loan program, approximately 1,500 institutions would participate in the program compared to the congressionally authorized limit of 10 under the pilot program. This expansion should assist many students by providing access to additional loan capital to help meet their costs. In the remaining institutions, students would continue to be eligible to receive Perkins Loans as well as Guaranteed Student Loans and Supplemental Loans to Students.

HIGHER EDUCATION

TRIO

Question: Also, minority and low income student enrollments are down. Why would the Administration suggest eliminating the action oriented mechanisms comprising TRIO which are designed to promote increased enrollments?

Answer: We have requested funding for the Student Support Services and Upward Bound programs because these are the TRIO components which provide direct services to students. We have not requested funding for the Talent Search, Educational Opportunity Centers (EOCs), and Staff Training Programs in order to focus our limited resources on those direct services programs which are most effective and of highest priority. The Talent Search and EOC programs provide academic and financial counseling services that duplicate State, local, and institutional efforts and responsibilities. In addition, much of the financial aid information made available through Talent Search and EOCs is available from a variety of other resources, including high school guidance counselors and student financial aid offices at institutions.

Questions Submitted by Senator Lowell P. Weicker, Jr.

SALARIES AND EXPENSES

ACCOUNT MERGER

Question: For the last several years you have requested that the salaries and expenses for the Office for Civil Rights and the Office of the Inspector General accounts be consolidated with the program administration account to form a single account, and each year the Congress maintains that these accounts remain separate. Why are you again requesting this change? Does this have anything to do with the ability to move easily (reprogram) lapsing OCR funds?

Answer: We request this merger again because we are convinced it will improve the Department's flexibility in managing resources while simplifying the account structure. As before, the integrity and independence of the Inspector General's funding would be assured by establishing a minimum funding level in the Salaries and Expenses appropriation language. The ability to utilize funds that would otherwise lapse under current appropriation structure is a factor in this request.

LAPSED FUNDS

Question: Have funds provided for any fiscal year for either the Office for Civil Rights or the Office of the Inspector General ever lapsed?

Answer: The Office for Civil Rights has lapsed funds every year since creation of the Department in 1980, at an annual average of $2.5 million since 1984. In the case of the Office of Inspector

General, funds have lapsed at an annual average of less than $100,000.

AWARDS INCREASE

Question: You are asking for an increase of $55,000 for awards to improve employee motivation and reward employee performance. What type of awards were they? Please provide us with a list of the average award, the highest award, and the lowest award given to employees at each GS and ES level.

Answer: Generally, these awards are performance awards granted to employees covered under the Performance Management and Recognition System (PMRS), formerly known as Merit Pay. The increase is necessary primarily to meet required minimum award levels to be paid out of the PMRS salary pool on a percentage basis. Managerial employees are automatically given awards for Outstanding and Superior performance ratings.

The most recent list of PMRS Performance Awards, which are given to GM employees, follows:

FY 1986 PMRS PERFORMANCE AWARDS

Grade Level	Number of Awards	Total Amount	Highest Award	Lowest Award	Average Award
GM-13	224	$157,815	$1,604	$290	$706
GM-14	284	$141,403	$2,293	$344	$498
GM-15	198	$498,198	$2,733	$405	$2,516
TOTAL	706	$797,416			

Question: What are the standards used to determine eligibility for and selection of the award recipients?

Answer: According to the Department's Personnel Manual Instruction on PMRS Performance Awards:

1. The Department of Education grants performance awards to PMRS employees no later than the last day of the fiscal year for the annual appraisal period ending June 30 of that year. To be eligible for a performance award, an employee must be in a PMRS position on the last day of the performance appraisal period for which awards are being paid. The amount of performance award is determined as a percentage of the employee's rate of basic pay on the last day of the performance appraisal period for which the award is being paid. Generally, percentages of rate of basic pay for performance awards are uniform within each principal organizational component (POC) for employees rated Outstanding or Superior.

2. Performance awards are based on the employee's performance rating.

   a. An employee rated Outstanding must receive a performance award of at least 2 percent and not exceeding 10 percent of base pay.

   b. An employee rated Superior must receive a performance award not exceeding 10 percent of base salary. Within each POC, the percentage amount of an award granted to an employee rated Superior must be less than any award received by employees at the same grade level rated Outstanding.

   c. An employee rated Fully Successful may receive a performance award not exceeding 10 percent of base salary. Within each POC, the award, represented as a percentage of basic pay, granted to an employee rated Fully Successful must be less than any award, represented as a percentage of basic pay, received by employees at the same grade level rated Superior.

   d. An employee rated either as Minimally Satisfactory or as Unacceptable is ineligible for a performance award.

STUDENT AID SURVEY

Question: Why are you requesting reduced funding for the final phase of the Student Aid Survey? Did you over estimate the funds that would be needed to complete this project or have you limited the scope of the study?

Answer: In 1987, the Student Aid Survey cost $6.8 million. In 1988, costs for the survey will be $3.1 million. The amount needed in 1988 is lower than in 1987 due to the completion of the data collection phase--data collection from parents, in-school students, and out-of-school students--in 1987. The reduction in 1988 is within the original scope and plan of the study.

Question: Would this reduction result in fewer or more restrictive findings? If so, please explain to this Committee why you support these adjustments?

Answer: As discussed above, the decrease in funding for the Student Aid Survey in FY 1988 is related to the three-year contract, which has lower costs in FY 1988 because of the completion in 1987 of the labor-intensive data collection phase. The level for FY 1988 does not represent a reduction, but reflects funding of all necessary activities. The findings will be at the level and scope which has been planned.

DEFAULTED LOANS INCREASE

Question: In your Justifications for the Office of Postsecondary Education you state that you expect reported cases of defaulted loans to increase by 300,000 to 400,000 cases. Why? How did you reach these estimates?

Answer: The Consolidated Omnibus Budget Reconciliation Act of 1985, which was enacted in April 1986, gave the Department the authority to report additional defaulted student loan accounts to

credit bureaus. These accounts were older accounts, largely older NDSL accounts. Although the law permitted changes in credit bureau reporting to be made as early as July 1986, the necessary changes to the Department's computer system were not completed until December 1986. As of December 1986, approximately 425,000 accounts had been reported to credit bureaus. Our best estimate at the time was that an additional 300,000 to 400,00 accounts would be reported. As of March 31, 1987, a total of 801,668 (an increase of 377,000) defaulted student loan accounts owing $1.286 billion have been reported to credit bureaus.

Question: What implications do these estimates have for the staff of the Office of Postsecondary Education?

Answer: These estimates do not increase OPE's staffing requirements.

TRAVEL FOR MONITORING AND COMPLIANCE REVIEWS

Question: Of the Department's total salaries and expenses funds spent in FY 1986 and planned to be spent in FY 1987, how much was actually used for monitoring and compliance reviews?

Answer: The amount of travel funds for program monitoring and compliance reviews will increase almost 50 percent. Approximately 50 percent of the Department's total travel budget for 1986, or $1.74 million, was spent for program monitoring and compliance reviews. In 1987, $2.69 million will be spent on travel for program monitoring and compliance reviews.

STAFFING PATTERN CHANGES

Question: The Department's request would fund 20 additional positions for the Office of the Inspector General, but would reduce the staff of the Office for Civil Rights by 20 positions. Can you please tell us why these shifts are necessary?

Answer: The even shift in FTE is coincidental. In the case of the Inspector General, more investigations of Student Financial Assistance recipients and more audits of automated data processing and financial systems are planned to occur during FY 1988. Thus, more FTE are necessary for a higher planned workload. In OCR, 20 fewer FTE is possible because of a more efficient use of resources. By implementing better procedures, OCR will be able to process and resolve complaints more effectively and efficiently even at the proposed 820 FTE level.

SPECIAL EDUCATION ADMINISTRATION

Question: You are requesting four additional staff positions and $20,000 in additional travel expenses for the Office of Special Education and Rehabilitative Service to "Assist with reponsibilities added by legislative amendments to the Education of the Handicapped and the Vocational Rehabilitation Acts." Yet there is no request for FY 1988 funds for programs newly authorized under these amendments. Please explain.

Answer: The four additional staff positions rquested for the Office of Special Education and Rehabilitative Services will assist in handling the new responsibilities resulting from the legislative amendments to existing programs as distinct from newly authorized programs. For example, the new legislation requires on-site compliance reviews for Projects with Industry for at least one third of the grantees receiving funds under this part in fiscal year 1987. This program must also receive on-site compliance reviews of at least 15 percent of the grantees annually in subsequent years. The legislation for Independent Living--Part B--requires a similar schedule of on-site compliance reviews. As a result of such mandated requirements, $20,000 in additional travel funds and four additional staff will be needed for these on-going activities which would continue into FY 1988 regardless of FY 1988 funding for the programs. The Secretary has already allocated additional hiring authority to this office to make sure all functions were performed thoroughly.

OCR BACKDATING OF DOCUMENTS

Question: The press has recently reported that Department of Education personnel in certain regional offices backdated documents so that it would appear they were complying with court-imposed deadlines to handle civil rights complaints. What is the status of this situation?

Answer: On April 23, 1987, the Acting Assistant Secretary for Civil Rights, Alicia Coro, testified before the House Subcommittee on Human Resources and Intergovernmental Relations on this matter. As she testified, she uncovered the problem and immediately sent out a team of OCR managers to investigate the case processing practices of all regional offices. She reported the results to Department officials, as well as to the Adams court and plaintiffs (on three occasions). She took disciplinary action against the responsible regional officials and is taking significant corrective measures to ensure that the problems do not recur.

Question: What steps are you currently taking to ensure that the situation is corrected?

Answer: The Acting Assistant Secretary has implemented a number of significant measures to guard against any recurrence of these irregularities. To appreciate better the extent of these measures, you should be aware that there were two categories of problems with the processing of cases: one involved dating discrepancies, while the other involved "tolling" abuses (that is, suspending activity on a case for various reasons, such as unavailability of witnesses, permissible under the Adams Order). Specifically, the following measures have been implemented:

- o A plan has been developed for periodic audits of regional case files and records to assess the validity of data entered into ACIMS (Automated Case Information Management System) regarding dates relevant to compliance with the Adams Order and the tolling of Adams timeframes.

- o A special performance objective has been added to all of the Regional Directors' performance agreements, which is designed to eliminate recurrence of the objectionable practices and to place personal responsibility upon the

Regional Directors themselves for monitoring regional performance. This includes the requirement that the Regional Directors have direct knowledge of the Adams due dates and can document the actual transmittal dates of all acknowledgement letters and Letters of Findings.

- The Regional Directors have developed regional monitoring systems to ensure that time-sensitive documents are dated accurately and that cases on toll status are reviewed periodically. These systems have been reviewed by OCR headquarters, and uniform case management processing systems have been developed.

- OCR has prepared detailed written guidance for the regions regarding the implementation of the Adams Order, particularly in the areas of issuance of Letters of Findings and tolling timeframes in order to avoid the possibility of any future misinterpretations of the requirements of the Order.

- Other preventive actions are being taken to avoid recurrence of Adams timeframe irregularities. For example, OCR is conducting a study of regional case processing procedures to identify opportunities for simplification. OCR is also reviewing current regional reporting and other administrative requirements to ascertain whether any of these requirements could be eliminated or modified, thus enabling regional staff and Regional Directors to devote a higher percentage of time to case management activities.

LAPSED OCR FUNDS

Question: The Regional Office personnel seem to be indicating that the workload is so burdensome that they have had to backdate and falsify documents in order to meet the court-ordered timeframes.

It is my understanding that the Department has been lapsing OCR funds in recent years. In fact, I am told that less than a month ago Mr. Carnes told the House Labor-HHS Subcommittee that the Office for Civil Rights has annually allowed between $1.5 million and $2.7 million in appropriated funds to revert to the Treasury. Is that correct?

Answer: Yes, but the amount of funds annually lapsed by the Office for Civil Rights has been between a low of $832,000 in FY 1982 and a high of $2.7 million in FY 1984, for an annual average lapse of $1.9 million.

Question: How much do you estimate will lapse within OCR in FY 1987? (We understand that it is somewhere in the nature of $2 million.)

Answer: Based on OCR's FY 1987 appropriation of $43 million and on estimated funding needs for the remainder of FY 1987, OCR anticipates a potential lapse of approximately $2 million. OCR's FY 1987 funding level was based on compensation for 840 FTE staff. However, as of April 25, 1987, OCR's on-board FTE was 800 with

estimated usage for FY 1987 to be approximately 805 FTE. Therefore, the amount of funding needed for employee compensation and benefits is estimated to be less than previously anticipated. The estimated lapse amount could change since it is contingent on the rate of employee attrition for the remainder of the fiscal year, the Department's processing of personnel actions to recruit and replace staff, and final action on procurement requests.

Question: Please explain precisely why the Office for Civil Rights consistently, year after year, allows appropriated funds to revert to the treasury.

Answer: The lapse in funds is due primarily to the fact that Congress has appropriated more than the OCR budget request --a request based on anticipated workload and measures of accomplishment.

Question: What activities are not being funded at their previously anticipated levels?

Answer: OCR presently expects personnel compensation and contracts to require less funding than was previously estimated. Because OCR's on-board staff level has dropped well below the 840 FTE authorized for 1987 (800 as of April 25, 1987) OCR will only use approximately 805 FTE. Consequently, the amount of funds required for compensation costs in FY 1987 is expected to be less than previously anticipated.

In the area of contracts, the funds needed for Litigation Support Services are presently estimated to be substantially less than had been anticipated earlier in the fiscal year. When OCR issues a Notice of Opportunity for Hearing it assumes, for budgetary purposes, that the case will come to trial, and funds are reserved to cover the expected costs of litigation.

The estimated costs within a given fiscal year can change, primarily for two reasons: (1) Some cases will settle before going to hearing; and (2) some cases will not go to hearing on schedule and, therefore, the funds will not be expended in the fiscal year for which the estimate was made. As it is impossible to predict exactly when a case will go to trial, or which cases may settle before trial, it is different to make accurate estimates of funds to be expended on litigation support in any future fiscal year.

Question: What steps has the Department actually taken during the past several years to remedy this situation?

Answer: The Department has proposed merging the three existing accounts of Departmental Management, Office for Civil Rights, and the Office of the Inspector General into a single administrative account. This proposal has been made by the Department in previous fiscal years and has been proposed for FY 1988. The Department's rationale for this proposal is that a single account structure would prevent simultaneous shortages and excesses of funds in the three accounts and improve the Secretary's flexibility to manage resources.

In the Justification of Appropriation Estimates for FY 1986, the Department cited such a situation that occurred in 1984 when the Office of the Inspector General needed a supplemental for increased pay costs and OCR had excess funds. Under the separate accounts, a supplemental appropriation was required of the Congress to obtain the needed funds. If these activities had been in one account, the need could have been met by a reprogramming.

It should be noted that Congress also has continually appropriated funds to the Office for Civil Rights in amounts which exceed the levels needed or requested for OCR.

Question: Rather than let funds lapse, couldn't you have devoted greater resources to reducing your complaint backlog, to conducting additional compliance reviews, to undertaking better surveys of civil rights compliance, or to providing additional technical assistance?

Answer: There is no backlog of cases. Although the number of complaints received has gone up every year but one between FY 1982 and FY 1986, the number of complaints pending at the end of FY 1986 was 74 percent of the number of complaints pending at the end of FY 1982. The average age of pending complaints at the end of FY 1986 was 174 days compared to 586 days at the end of FY 1982--a drop of 70 percent. The number of compliance reviews initiated in FY 1986 is down from FY 1985; however, the number does not reflect the on-site monitoring visits conducted at 254 post-secondary schools in connection with the expired higher education desegregation plans in 10 States. If this number is added to the 196 compliance reviews otherwise conducted, the total is 450 reviews, a 57 percent increase from 1983.

OCR STAFF ATTRITION

Question: What is the percent of decrease OCR staff has undergone in the past 6 years?

Answer: From FY 1981 through FY 1987 to date, the OCR staff has decreased 26.9 percent compared to the Department's 41.5 percent reduction for the same time period.

Questions Submitted by Senator Pete V. Domenici

BIENNIAL BUDGET PROPOSAL

Question: Calls for budget reform are increasingly heard as budget deadlines are too often missed, important budget decisions are delayed, appropriations bills and other direct spending legislation are held up in committee, and omnibus spending bills take the place of timely and orderly consideration of individual bills. One procedural reform that is being considered is the two-year budget cycle where budget and appropriations matters would be considered in the first year, and authorizations and oversight would be taken in the second year.

Would your department/agency favor a biennial budget process?

Answer: I think the biennial budget proposal deserves serious attention. From my observation, too much time and emphasis is focused on the annual budget process for the amount of change that is accomplished. I certainly would favor biennial budgeting as a procedural improvement, particularly if it were to help address the Federal deficit targets in the Balanced Budget Act, facilitate timely consideration of appropriations bills, and allow the Department more time for program oversight.

BENEFITS OF A TWO-YEAR BUDGET CYCLE

Question: What benefits would your agency achieve in a two-year appropriation cycle?

Answer: Biennial budgeting would appear to have substantial advantages for a number of agencies. With respect to our agency, the Department of Education would likely experience the following benefits over the current system:

- The Department and the recipients of ED funds could engage in more effective budget planning. Under the current annual appropriations cycle, the last-minute scramble to pass spending bills makes planning difficult. Two-year budgeting would lessen this strain, or, at minimum, allow it to happen only every two years rather than annually.

- If, as you have suggested, appropriations were considered in the first year of the cycle, and authorizations were undertaken in the second year, the Department and Congress would have the opportunity to focus more closely not only on program finances, but also on the substance of the programs themselves. A thorough, thoughtful, and critical review of the appropriations and authorizations would increase program efficiency and effectiveness, thereby increasing program stability. The Department and the recipients of ED funds would benefit, too, because likely award levels could be announced long before the start of the school year.

- Biennial budgeting would save a tremendous amount of time and resources. Less time would be spent on what appears to be a large amount of repetition in the annual appropriations process which does not significantly affect the outcome.

REDUNDANCY IN THE CURRENT BUDGET PROCESS

Question: Approximately what proportion of your annual appropriation request would you consider simply repetitious of the previous year's submission?

Answer: By its nature, the budget process is cyclical, and therefore, repetitive. The problems and issues examined in each program tend to be the same each year, and the budget proposals tend to be very similar; therefore, much of what we do to prepare our request is duplicative of the previous year's work. It is difficult, however, to estimate what portion of our annual request is repetitive. I would note that a biennial budget process will only change the frequency and not the difficulty of preparing materials and making decisions.

POTENTIAL DIFFICULTIES IN SUBMITTING A TWO-YEAR BUDGET

Question: What difficulties can you forsee in preparing and submitting a two-year budget to Congress?

Answer: As long as the opportunity exists in the off-year to revise the budget, we anticipate no problems in preparing and submitting a two-year request. Opportunities may be necessary to adjust budget levels in the off-year to meet a program's changing needs, particularly for the Department's administrative budget and for entitlement programs, in which needs are difficult to anticipate, primarily because of fluctuating Treasury bill rates and related loan interest subsidy costs.

On the other hand, while I think we would need the flexibility of being able to revise budgets in the off-year, we should be aware that the "off-year budget process" could get out of hand and reduce the benefits that one would hope to gain through budget reform. Off-year budgets could grow so big, complex, and cumbersome that the resulting budget process would be of similar magnitude to that of the annual budget.

BUDGET SAVINGS

Question: Would you plan to expect any budget savings if you could plan your agency budget on a two-year basis? If so, please estimate how much.

Answer: The Department may save on administrative costs. In the past few years, Congress has failed to enact appropriations prior to the end of the fiscal year and has had to pass either short- or long-term continuing resolutions. On occasion, this action has forced government-wide shutdowns, which cost the Department of Education approximately $750,000 per day. A two-year cycle would, at least every other year, avoid the possibility of a shutdown.

The adoption of a biennial budget would also save monies associated with the costs of budget presentation and justification. For example, the cost to print the Department's justifications and press release materials was about $24,000 in fiscal year 1987. Some of these costs might be avoided in the off-years, as the Department would need to print only materials associated with supplementals and rescissions.

OPPOSITION TO THE BIENNIAL BUDGET PROPOSAL

Question: If you oppose the biennial budget concept, please give this subcommittee your reasons why.

Answer: I do not oppose the two-year budget concept and welcome a budget reform movement that reduces the federal deficit, improves the Department's program oversight, and streamlines what is now a cumbersome process.

OFFICE OF INSPECTOR GENERAL

STATEMENT OF JAMES THOMAS, JR., INSPECTOR GENERAL ACCOMPANIED BY MITCHELL LAINE

PREPARED STATEMENT

Senator CHILES. We will conclude this morning's hearing by receiving testimony from James Thomas, the inspector general for the Department of Education, a position which he has held since 1981. Mr. Thomas and his staff are responsible for monitoring the spending of over $19 billion in the 137 Education Department programs.

Education programs, where there are millions of beneficiaries and thousands of intermediary agencies, are especially vulnerable to fraud, abuse, and mismanagement. We look forward to hearing about the Department's priorities in 1988 for aggressively auditing education expenditures and identifying opportunities to improve program management and achieve savings.

Mr. Thomas, if you would proceed with a summary of your remarks and tell us briefly, if you can, about some of your recent accomplishments and what you expect to accomplish next year. Your statement in full will be included in the record.

[The statement follows:]

STATEMENT OF JAMES B. THOMAS, JR.

Thank you for the opportunity to discuss our fiscal year 1988 budget request for salaries and expenses of the Office of Inspector General.

The Office of Inspector General [OIG] was established to promote economy and efficiency and to detect waste, fraud, and abuse in Federal education activities. For fiscal year 1988, we are requesting a budget of $18.6 million and 320 full-time equivalent [FTE] staff. This is an increase of 20 FTE over projected fiscal year 1987 usage and an increase in budget authority of $2.2 million over the 1987 level.

OVERALL REQUEST

Of the total 1988 budget request for OIG, $14.3 million or 77 percent is for salaries and benefits. An additional $1.1 million is for travel expenses; $1.8 million is for the cost of rent, communication, and management service charges; $718,000 is for ADP rentals and services; and $651,000 is for contracts and other services.

Of the $2.2 million increase for 1988, $1.7 million or 75 percent is for salary expenses including the costs for the new retirement system; approximately $320,000 is for increases in travel, rent, and other services; and $150,000 is for contracting of audit and investigative services.

Our 1988 budget request will enable us to continue our ongoing effort to provide adequate and appropriate coverage of the Department's programs and operations.

HIGHLIGHTS OF 1986 ACCOMPLISHMENTS

In 1986, the OIG issued or processed reports on 16 internal audits, 94 program audits, 29 preaward audits, and 61 contract audits and provided technical assistance in 125 cognizant assignments under Office of Management and Budget Circular A-128. In addition, OIG issued or processed 2,951 non-Federal audit reports. In total, reports issued or processed recommended disallowance of costs totaling $93 million and questioned additional costs of $29.4 million. Audit-related activities resulted in recoveries of $27.4 million during the year. In addition, if recommendations included in the reports are implemented, the result would be a more efficient use of funds totaling $33.6 million.

In 1986, 929 investigations and inquiries were completed. The investigations which substantiated criminal wrongdoing resulted in the referral of 294 cases to prosecutors.

Investigative activities led to 178 indictments/informations and 138 convictions/pleas and pretrial diversions, and 2 civil filings. The activities also resulted in fines of $80,275, restitutions of $1.7 million, recoveries of $82,644, and civil settlements of $220,000.

A total of 154 hotline complaints were closed. Of the number of complaints closed, 39 were substantiated and resulted in corrective actions. Cases closed attributable to hotline activities resulted in savings and recoveries of about $1.1 million.

OIG reviewed 491 legislative and regulatory documents, as well as departmental policy documents and reports to the Congress. In several cases, through prepared comments and in direct discussions with Education Department officials, we were able to effect needed improvements to decrease the potential vulnerability of Department programs to fraud and abuse or increase the efficiency and effectiveness of such programs.

I will be happy to respond to any questions the committee may have.

SUMMARY OF REQUEST

Mr. THOMAS. Thank you, Mr. Chairman. It is a pleasure to be here with you this morning.

Our budget this year will call for a total of $18.6 million and a staff of 320 which is an increase of 20 on our staff for 1988 over 1987. We think that we have had a very significant role in the Department of Education over the last 6 years. As you indicated, we have been there pretty much since the beginning when the Department was created.

During this past year, we have processed over 3,100 audit reports. Those audit reports had recommended disallowances totaling about $93 million and questioned costs of some $29 million, for a total of over $122 million.

In addition to those, of course, we have the ongoing process which we call preventive in nature where we make recommendations to improve systems which will result in what we call more efficient use of funds. By following the recommendations that we make, the funds which the Congress appropriates can be put to the uses that were intended on the programs and can be used more efficiently. For the 1986 period of time, almost $34 million could be put to more efficient use based on the recommendations that we made.

During that same period of time, we had 178 indictments and 138 convictions resulting from the work that we did in our investigative effort. One of the big things that we did in the Department of Education,

one of the big contributions we made, was to participate in the development of legislation and regulations.

Last year, we reviewed some 491 legislative documents and regulatory documents. The thrust of our review there is to make sure that there are adequate internal controls built into those systems at the beginning so that we will not have the problem of fraud or abuse cropping up later on.

With that, Mr. Chairman, I will stop and go to your questions.

OIG RESOURCES

Senator CHILES. Thank you, Mr. Thomas. We want to be absolutely sure that you have the resources you need to perform that vital watchdog function that you have. I know your office workload is increasing substantially as the States implement the Single Audit Act and your auditors review a larger number of reports.

What worries me is that in order to meet these new demands you will have to reduce your efforts in other very important areas like conducting nationwide program audits that produce recommendations for significant program savings and management improvements.

In what areas are you planning to reduce your audit efforts in order to meet the increased workload demands of the Single Audit Act, and what additional funding and manpower would you need to maintain the current level of activity in these areas?

Mr. THOMAS. We have kind of an anomaly in this particular year, Mr. Chairman. Because of the Gramm-Rudman cutbacks in fiscal year 1986, we had to reduce our onboard staffing from 300 to about 250 in order to meet our payrolls. So since the beginning of the current fiscal year 1987, we have been in the process, because of the budget that we have for fiscal year 1987, of rehiring some 50 people.

So far we have been successful in bringing back onboard about 40, so that the involvement that we have had in 1986 took a nosedive for a while. It is now on the climb, and with the budget that we have requested for 1988 to increase that number even further from 300 to 320, we feel that we will have quite a substantial ability to have an impact on the departmental programs.

Now, what you say about the non-Federal audits, those of single audits and other programs in which we have very heavy involvement in our Department through the student financial assistance programs, we know that our plan for next year calls for about 22 percent of our audit staff to be used in the processing of these non-Federal audits.

It will only be at the beginning of the next fiscal year that we really find out the full impact of the single audit, because those audits are due starting this summer for the first time under the Single Audit Act of 1984.

We are trying to maintain a presence in all of the programs, particularly the major programs in the Department. We have now in our field staff about one out of four being new in the Department, so we have a unique opportunity to train these folks and to make sure that we get

the greatest possible benefits from their services. Even if we were to be granted many more people this year, I am not sure that we could assimilate them into our existing staff.

So we feel that we are in pretty good shape for 1987 and 1988, Mr. Chairman.

REDUCTION OF FRAUD

Senator CHILES. There have been frequent past instances of fraud by participants in the Guaranteed Student Loan Program, such as ineligible students receiving loans and students getting duplicate loans.

What specific steps have been taken to reduce this potential for fraud?

Mr. THOMAS. One of the prime things that we have been involved in, again, is legislative review and regulatory review. We have tried to build in some guidelines and some internal control processes, and many of those have been built into the Higher Education Act reauthorization which came into being and is now being implemented. Some of that has to do with multiple payees on checks and things of that kind, other internal control systems that would be present locally.

One of the big issues is to have an impact on those who actually commit the fraud against the Government, those who actually fraudulently apply for grants and loans and then receive those grants or loans, or those who manipulate the program who are not students at all, people who own businesses, people who are student aid officers, people who are bank officers and the like.

One of the things that we have instituted in this present timeframe is to require guarantee agencies not only to refer indications of wrongdoing to us at the Federal level but to refer those to State and local law enforcement officials, because there they have resources to investigate and prosecute crimes against the Government.

So we feel that by having guarantee agencies make referrals of wrongdoing to local law enforcement officials, we will have a much greater impact nationwide than we possibly could with a staff at the Federal level. We are waiting to see how this process is implemented and its effect. We think it will be significant.

NATIONWIDE SYSTEM

Senator CHILES. Well, the Department of Education has been unable to create a nationwide system that would allow guarantee agencies to identify duplicate loans before they are made, thus avoiding fraudulent loans.

What advances are being made in creating such a system?

Mr. THOMAS. Based on an audit that we did 1 year ago, Mr. Chairman, we recommended a national data base on guaranteed student loans, and, in fact, in the recent legislation such a data base was put into law. We think that when that data base is implemented it will be significant in providing certain controls and certain points.

Senator CHILES. When will that be?

Mr. THOMAS. The Secretary, I believe, made a commitment that this fiscal year it would be in place.

Senator CHILES. I would think that would be tremendously important that somebody could pull up on the computer screen and look and make a rapid check, a scan, of that.

Mr. THOMAS. One of the problems we have with that legislation, Mr. Chairman, is that when it was enacted it had a clause in there which prohibited the Department from forcing the people who had it available to them to use it for enforcement purposes.

So we are now working, as part of the legislative review, with the Department to try to get a technical amendment so that the data base will, in fact, be able to be used more effectively.

Senator CHILES. Has the Department taken the proposition that they are going to do nothing until they get the law changed?

Mr. THOMAS. No, sir; that is not my understanding. My understanding is that the Department is readying itself to start that system.

Senator CHILES. I hope they will. I think that is very necessary. We will see what we can do to help make the change.

Mr. THOMAS. When I get back I will get with Assistant Secretary Ron Kimberling and convey your message to him.

QUESTIONS SUBMITTED BY THE SUBCOMMITTEE

Senator CHILES. There will be some additional questions which we will submit to you for your response in the record.

Mr. THOMAS. We will be glad to respond to the questions.

[The following questions were not asked at the hearing but were submitted to be answered for the record:]

Questions Submitted by the Subcommittee

STAFF FOR SINGLE AUDITS

Question: In what areas are you planning to reduce your audit efforts in order to meet the increased workload demands of the Single Audit Act? What additional funding and manpower would you need to maintain the current level of activity in these areas?

Answer: With a finite level of resources and given the number of organizations and individuals participating in ED programs, we are always faced with decisions about how we can allocate our resources to accomplish best our mission. The more resources expended on our single audit workload, the less we are able to put toward our other audit efforts. We presently plan to allocate about 22 percent of our audit staff time in the area of non-Federal audits. This includes single audits, audits of our student financial assistance programs, and audits covering a few other programs.

Because of a reduction in 1986 in our on-board staff level resulting from the Gramm-Rudman-Hollings legislation, we were in a situation this year of having to refill approximately 50 positions to get up to our 1987 ceiling of 300. With this filling of positions, and with our 1988 budget request, which provides for increasing our staffing to 320, we believe that the expected increase in single audit activity will not cause us to reduce other audit efforts below current levels nor will it significantly impair us from putting forth substantial audit efforts in other areas.

Because implementation of the Single Audit Act is still in the early stages, the full impact of the increased single audit workload will not be known until after this summer when most of the first audit reports under the Single Audit Act are due. Future budget requests will include provision for additional staffing if it becomes necessary based on our experience as the act is fully implemented.

FRAUD REDUCTION

Question: There have been frequent past instances of fraud by participants in the Guaranteed Student Loan program, such as ineligible students receiving loans and students receiving duplicate loans. What specific steps have been taken to reduce the potential for fraud?

Answer: The Office of the Inspector General (OIG) has initiated activities in several areas aimed at reducing the potential for fraud. The student aid programs are the ones in which we have most frequently found fraud, and we have targeted many of our efforts in this area. In addition to OIG's investigations, which act as a deterrent when indictments and convictions result and become known in the community, OIG activities include the following:

- In order to seek the cooperation of Guaranteed Student Loan program participants in reducing and eliminating

fraud and program abuse, the Department of Education, through the OIG, has developed a pamphlet entitled "Special Fraud Alert for Schools, Lenders and Guarantee Agencies." The pamphlet provides indicators and examples of student aid fraud and provides information on how to spot potential fraud and where to report it. Over 27,000 of the pamphlets have been mailed to schools, lenders and guarantee agencies that participate in the program. A copy of this pamphlet has been provided to the subcommittee.

- o The OIG makes presentations to professional groups within the financial aid community and offers training at seminars and workshops on fraud detection and prevention techniques.

- o OIG special agents work closely with college campus law enforcement officials to guard against and investigate cases of student aid fraud.

- o The Office of Inspector General's fiscal year 1987-88 Audit Plan contains 13 proposed audits of the various student loan programs.

- o Several of the recommendations we have made concerning student aid programs were incorporated in the Higher Education Amendments of 1986, other recent legislation, and program regulations:

  - New legislative requirements include multiple disbursements of guaranteed student loans and consideration of a student's repayment status on a Higher Education Act loan received at any school.

  - New regulations require that lenders send checks directly to institutions.

  - Revised regulations require improved guarantee agency controls to ensure vigorous enforcement of Federal, State, and guarantee agency requirements. Such control procedures now required include: adopting procedures for identifying fraudulent loan applications; reporting all allegations and indications of criminal violations, and the scope, progress and results of any subsequent investigations to the Secretary; and referring appropriate cases to local authorities for prosecution.

  - Revised regulations now require that if an owner of an institution, the institution, or chief executive of an institution is convicted of, or pleads guilty to, a crime involving unlawful use of expenditure of Title IV student loan funds, such a violation is an automatic ground for terminating the institution's eligibility to participate in the Title IV student loan programs, and all other student financial assistance programs.

- The OIG has also proposed a change to the Student Assistance General Provisions regulations that would require schools participating in Title IV Student Financial Assistance programs to refer any suspected fraud to the appropriate State and local law enforcement authorities. OIG and Office of Student Financial Assistance staff have met and agreed on the concept of the referral requirement and are currently developing language for inclusion into the final regulation. The General Provisions are expected to be published in December 1987.

NATIONWIDE LOAN DATA SYSTEM

Question: The Department of Education has been unable to create a nationwide system that would allow guarantee agencies to identify duplicate loans before they are made, thus avoiding fraudulent loans. What advances are being made in creating such a system?

Answer: The Office of Inspector General, in a report on fraud and abuse in the GSL program, recommended that the Department establish a national GSL data base and require guarantee agencies to confirm borrower application data against the data base to prevent borrowers from using false statements to obtain loan guarantees and from receiving duplicate loans. The Department concurred with our recommendations.

The Department is now doing developmental work on the data base. It is looking at several issues, including cost, sources of information, technical problems related to both information allowed by current law and information which is needed. After this developmental work is completed, the Department will be better able to determine whether to proceed with setting up a data base or whether a data base would not be cost effective unless current prohibitions against requiring its use are removed.

The Higher Education Amendments of 1986 preclude the Department from requiring guarantee agencies, lenders or schools to obtain eligibility information on borrowers from the data base prior to making or guaranteeing a loan, thus raising serious questions about the effectiveness of the system.

OIG has worked with Department officials on proposed technical amendments to lift the restriction and recommend that such amendments be passed to allow effective implementation of the system.

PROSECUTIONS

Question: Why are so many investigations that are referred for prosecution rejected (46 percent in fiscal year 1986) if the Department already has screened them to be sure they meet the funding thresholds established by the district attorneys?

Answer: Under the Inspector General Act of 1978, as amended, the Office of Inspector General is charged with the responsibility to investigate allegations of fraud, waste and abuse and to expeditiously report to the Attorney General whenever the Inspector General has reasonable grounds to believe there has been a violation of Federal criminal law. In an effort to pursue an aggressive

enforcement program, the OIG has also made referrals for prosecution to State and local prosecutors where we have determined that the crimes would be more effectively dealt with at the State or local level.

In both referrals to U.S. Attorney's Office and to State or local prosecutors, the OIG only refers an investigation which has developed evidence which leads us to believe that a criminal violation has occurred. On the basis of our investigation findings, and other relevant factors, it is the prosecutor who then decides whether or not to prosecute the case.

The prosecutor, exercising prosecutorial discretion, may decline criminal prosecution for a variety of reasons, only one of which is the amount of loss. It has been our experience, however, that a case is declined for a combination of reasons, such as workload of the individual prosecutor's office, lack of jury appeal, availability of civil or administrative remedies, and lack of resources, rather than a single factor such as dollar loss.

On the other hand, even a low dollar case may be accepted for prosecution because the facts developed by the investigation make it an attractive case for the individual prosecutor. Since each case is considered on its own merits and the prosecutorial decision generally turns on the specific facts, evidence and mitigating factors peculiar to that case, it is difficult to predict precisely which cases will or will not be prosecuted.

MONITORING NEW PROGRAMS

Question: What plans does your office have to monitor the implementation of the new grants for infants and families and supported employment programs?

Answer: Fiscal year 1987 appropriations include $50 million for grants for handicapped infants and their families under the Education of the Handicapped Act, Part H, and $24.2 million for grants for supported employment services for individuals with severe handicaps under the Rehabilitation Act Amendments of 1986.

Since the programs are to be administered by State agencies, basic audit coverage of the entities administering these programs will be provided under the Single Audit Act of 1984. Once the programs are implemented, vulnerable areas may surface as a result of single audits or concerns expressed by Congress or others. We would pursue these concerns as our resources permit.

RECOMMENDATIONS FOR SAVINGS

Question: Please describe the program changes your office recommended in fiscal year 1986 to save an estimated $33.6 million.

Answer: Our office made close to 40 recommendations in fiscal year 1986 for program changes, improvements in the operations of State agencies or postsecondary institutions, or reductions in proposed amounts for contracts with the Department, to save or use more efficiently an estimated $33.6 million. The most significant of these recommendations are summarized in our 12th and 13th semi-

annual reports to the Congress. Highlighted below are representative examples of the recommendations we have made:

-- One nationwide audit disclosed that an additional $8.4 million in National Direct Student Loans, now known as Perkins Loans, would be available annually if regulations were revised to require investment of idle loan funds.

-- Another audit report on the Guaranteed Student Loan (GSL) program estimated that the Department could save $8.3 million annually through the creation of a national GSL data base that would help prevent borrowers from securing new loans after defaulting on previous loans or exceeding statutory loan limits. Congress, under the 1986 Higher Education Amendments, P.L. 99-498, authorized the Department to establish such a data base. However, as noted above, Congress also prohibited the Department from requiring guarantee agencies, lenders or schools to obtain eligibility information on borrowers from the data base prior to making or guaranteeing a loan.

-- In a management improvement report, we recommended that the Department change the manner in which the National Direct Student Loan default rate is calculated and estimated that about $3.6 million would be distributed more efficiently as a result because it would be distributed to institutions with better collection records, instead of to institutions with poorer collection records.

-- A nationwide audit of College Housing Loan program administration disclosed that policies and procedures for loan collection needed improvement. We estimated that $2 million in financing costs for the payments and interest in arrears could be saved each year if the Department initiated foreclosure procedings against institutions that have been in default over one year and have not entered repayment agreements or received deferments from the Department.

-- Our audit of a State guarantee agency disclosed that the agency was retaining reserve fund advances in excess of that needed to meet its obligations to lenders. We recommended that excess insurance payment advances of $13.9 million be returned to the Federal government, and estimated its return could save the government $1.1 million annually in interest.

NON-PROFIT INSTITUTIONS

Question: Please describe the Department's plans to revise its audit procedures for non-profit institutions if the Office of Management and Budget does not issue a revised Circular A-110 in the next few months. What impact will these new procedures have on your office's workload?

Answer: If the Office of Management and Budget (OMB) does not revise the audit requirement in OMB Circular A-110, Attachment F, we will evaluate the need to develop and establish audit policy for

postsecondary programs not currently being covered by required non-Federal audits. This evaluation will include discussion with the Department's program officials.

Changes to audit requirements should not result in any significant change in terms of the number of non-Federal audit reports received. Rather, changes in the required audit coverage are likely to make the reports we already receive from the institutions more complex because they will include programs not presently included. The added complexity may increase the time it takes for our office to carry out its responsibilities with respect to these reports.

SINGLE AUDIT DEFICIENCIES

Question: We understand that an unexpectedly high percentage of the first audits conducted under the Single Audit Act have been deficient. Please describe the most common deficiencies. Have deficient audits been associated with particular types of institutions?

Answer: The Single Audit Act applies to any of a State or local government's fiscal years which begin after December 31, 1984; reports are due one year after the fiscal year ending date. Since many entities from which the Department of Education will receive reports have fiscal years ending on June 30, their first required audits under the Act will be due to the Department by June 30, 1987. Therefore, we have received very few reports on audits conducted pursuant to the Single Audit Act and OMB Circular A-128. Thus it is premature to draw any conclusions regarding the quality of these audits. However, we have had significant problems with the quality of audits conducted pursuant to OMB Circular A-102, Attachment P, which was the predecessor single audit requirement.

With the issuance of OMB Circular A-128 and other guidance (such as the American Institute of Certified Public Accountants' Audit Guide, Audits of State and Local Governmental Units), we believe there is now much improved and clearer guidance on the conduct of these audits. However, we do not yet have enough experience with reports made pursuant to the new circular and other guidance to evaluate whether the quality of these audits has improved.

AUDIT PRIORITIES

Question: We know that you follow OMB Circular guidance in identifying priority areas for audit activity. According to this priority system, which Department programs are considered most vulnerable and, therefore, need the most frequent monitoring?

Answer: Based on the dollar size and nature of the programs, we consider the programs administered by the Office of Postsecondary Education (OPE) to have the highest risk and, therefore, the need for significant audit coverage. OPE's fiscal year 1987 budget is approximately $8.9 billion, or nearly half of the Department's total budget. In addition, OPE is responsible for a multi-billion dollar portfolio of Guaranteed Student Loans (GSLs). These GSLs are processed through a complex delivery system involving many parties, including students, banks and State guarantee agencies.

The next most vulnerable areas are the programs administered by the Office of Elementary and Secondary Education (OESE) and the Department's ADP and accounting systems. OESE's fiscal year 1987 budget of $5.7 billion is approximately one-fourth of the total Departmental budget. Its programs are vulnerable because they involve a large number of sub-recipients along with complex allocation procedures. We also consider the Department's ADP and financial accounting systems to have high risk. These systems process the Department's financial transactions totalling billions of dollars, and prior reviews have shown the need for improved controls and operating procedures.

AUDIT PLANS

Question: Does your office have a long-range planning cycle for internal and nationwide program audits? If so, please submit a copy for the record. If not, please provide a record of how frequently major internal Department functions and major Department programs have been audited in the last four years.

Answer: Each year, the OIG updates its long-range strategy and develops goals for the next fiscal year. Based upon these, we develop a two-year audit work plan which includes internal and nationwide program audits. This planning cycle includes an annual evaluation of each of the Department's major programs for prior audit coverage, known problem areas, and vulnerable areas. Copies of the fiscal year 1987 strategy and goals and fiscal year 1987-88 audit work plan have been provided to the subcommittee.

AUDIT BACKLOG

Question: Please describe the proposed $100,000 contract in fiscal year 1988 to eliminate audit backlogs. How many audits were backlogged at the end of fiscal year 1986? How many do you expect to be backlogged at the end of fiscal year 1987?

Answer: Our current audit policy is to conduct close-out audits only on completed, terminated or expired contracts with costs in excess of $1,000,000. The Department currently has 20 active contracts over $1,000,000. For those contracts below $1,000,000, we conduct an audit only when there is a significant concern raised by the contracting officer or others.

For contracts over $250,000 for which a close-out audit is not performed by the Office of Inspector General or by a non-Federal auditor, the contracting officer is required by the Federal Acquisition Regulations to perform a desk review before the contract can be closed out. However, these desk reviews do not provide the contracting officer with the same degree of assurance that audits do in regard to allowable expenditures under the terms and conditions of the contract.

In 1986, there were 41 contracts over $250,000 which were not audited. At the end of fiscal year 1987, there will be a backlog of 50 contracts not being audited.

For fiscal year 1988, we propose to contract with non-Federal auditors to perform close-out audits of 15 contracts that may pose a high degree of risk, but which do not meet the audit criteria

for Office of Inspector General. While this will not provide for audit coverage of all contracts, those selected for audit will be subjected to significantly more in-depth scrutiny than that currently provided by a desk review.

RECOVERIES

Question: What percentage of sustained recommendations for audit disallowances are eventually recovered?

Answer: From the inception of the Department in 1980 through September 30, 1986, Department program officials sustained $366.8 million based on audits. Included in this amount is $116.8 million which is currently under appeal.

As of September 30, 1986, $90.6 million had actually been recovered with an additional $46.8 million of accounts receivable due which were not under appeal. An additional $10.5 million was recovered during the 6-month period ending March 31, 1987.

The amounts sustained which will not be recovered are the result of write-offs and settlements, lost appeals, expiration of the statute of limitations, and miscellaneous adjustments.

RATE OF DISALLOWANCES

Question: What is the implication of your reported finding that audits conducted by your staff result in higher recommended disallowances than those done by independent public accountants (see page 2 of the Semi Annual Report to Congress, No. 13)? Is this due to different types of institutions being audited?

Answer: There are a number of reasons why findings in audit reports conducted by Federal auditors contain more dollars questioned and/or disallowed. These reasons relate to the differing purposes and scopes of Federal and non-Federal audits.

Audits performed by non-Federal auditors are designed to focus on internal controls and key compliance elements of Federal assistance programs. They provide broad coverage to determine whether the entity has basically complied with the significant laws and regulations of the programs being audited and has the necessary systems in place to properly manage Federal program funds. On the other hand, our audits provide more in-depth coverage of areas and entities where problems have been identified (either by non-Federal audit reports, program officials or our own surveys) and on compliance with specifically selected sections of laws and regulations.

Another difference is in the approach used for quantifying findings. Where non-Federal auditors find significant weakness in internal controls and non-compliance with Federal program regulations, the amount questioned is related only to transactions tested. The non-Federal auditor is not required to project the questioned costs over the universe of Federal program dollars. In OIG, we generally project or extend our procedures to determine the full effect on the entire universe of program dollars, thus resulting in higher dollar findings.

NATIONWIDE AUDITS

Question: Please describe your office's efforts to increase the proportion of staff days allocated to nationwide program audits. What was this percentage in fiscal year 1986, and what do you expect it to be in fiscal year 1987 and fiscal year 1988?

Answer: In fiscal year 1986, we spent approximately 20 percent of our audit staff days conducting nationwide program audits. In fiscal years 1987 and 1988, we expect this percentage to increase slightly. While the percentage will only increase slightly, we anticipate an increase in the total number of audit staff days allocated to nationwide audits, based on the increase in our on-board staff size. It should be noted that the trend for the past five years shows a steady increase in audit staff allocation to nationwide audits.

SUBCOMMITTEE RECESS

Senator CHILES. We thank you.

All right, the subcommittee will stand in recess until 9:30 a.m. tomorrow when we will meet in room S-146 of the Capitol to continue our hearings with the Department of Education.

Thank you for your appearance.

Mr. THOMAS. Thank you, Mr. Chairman.

[Whereupon, at 11:20 a.m., Wednesday, April 22, the subcommittee was recessed, to reconvene at 9:30 a.m., Thursday, April 23.]

DEPARTMENTS OF LABOR, HEALTH AND HUMAN SERVICES, AND EDUCATION AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1988

THURSDAY, APRIL 23, 1987

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 9:40 a.m., in room S–146, the Capitol, Hon. Lawton Chiles (chairman) presiding.

Present: Senators Chiles, Burdick, and Weicker.

DEPARTMENT OF EDUCATION

ELEMENTARY AND SECONDARY EDUCATION

BILINGUAL EDUCATION

VOCATIONAL AND ADULT EDUCATION

STATEMENT OF BRUCE M. CARNES, DEPUTY UNDER SECRETARY FOR PLANNING, BUDGET AND EVALUATION

ACCOMPANIED BY:

LOIS BOWMAN, ACTING ASSISTANT SECRETARY FOR ELEMENTARY AND SECONDARY EDUCATION

CAROL PENDAS WHITTEN, DIRECTOR, OFFICE OF BILINGUAL EDUCATION AND MINORITY LANGUAGES AFFAIRS

JOHN PUCCIANO, ACTING ASSISTANT SECRETARY FOR VOCATIONAL AND ADULT EDUCATION

OPENING STATEMENT

Senator CHILES. This morning we will hear testimony on the elementary, secondary, vocational, and adult education programs. The administration deserves a great deal of credit for its role in fostering the school reform movement since the initial publication of "A Nation at Risk." This focus on excellence, however, has sometimes been criticized for being insensitive to the special needs of disadvantaged youngsters.

Demographics tell us that student population at all levels will be increasingly poor in the years to come, so I am glad that the administra-

tion sent us a proposal to increase chapter 1 services and focus these services on the neediest students.

I do not have a reason to be pleased with many other parts of the budget. The administration claims that literacy training for new immigrants and illiterate adults is a high priority, and while the budget requests a $24 million increase in adult education it simultaneously asks us to terminate funding for immigrant education, refugee education, the library literacy initiative, and the literacy component of vocational education. That would represent a net cut in literacy services of about $200 million.

In the area of vocational education and math and science, the budget simply ignores the Nation's concern with competitiveness. The President told us in the State of the Union message that we must increase our investment in human capital, but the budget proposes that we divest from our targeted efforts to improve vocational skills, provide job training to our most disadvantaged students, and modernize our math, science, and vocational education programs.

The administration has told us that the funds we invest in tomorrow's workers through vocational education are needed to pay for the new displaced workers program in the Department of Labor. Well, the Senate Budget Committee has reported a budget that provides funding for the displaced worker programs, protects our investment in vocational education, provides for increases of critical education, and reduces the deficit by a greater amount than the President. So this year again it looks like we will need to protect the Department from itself.

We will now proceed to the statement of the Deputy Under Secretary, who will present an overview for this morning's hearing.

PREPARED STATEMENTS

Mr. Carnes, your statement in full will appear in the record along with those accompanying you.

[The statements follow:]

Statement of Bruce M. Carnes

President's Fiscal Year 1988 Budget

I am pleased to appear before this Committee to discuss the 1988 budget for Department of Education programs in the areas of elementary and secondary education, bilingual education, and vocational and adult education. The requests for these programs total over $5.7 billion--almost 41 percent of our 1988 budget.

We have concentrated our resources on these programs because, for the most part, they meet our highest priorities for Federal education spending. These are programs in which there is a clear Federal responsibility, and which enhance opportunities for poor, disadvantaged, and limited-English speaking students; focus on the critical early years of schooling; improve education quality, primarily through teacher training and flexible block grants; and teach basic academic and literacy skills.

Chapter 1 of the Education Consolidation and Improvement Act, the largest Federal program at the elementary and secondary level, provides supplementary education services for children who are economically and educationally disadvantaged. For 1988, we are proposing $4.1 billion, an increase of $200 million over the 1987 enacted level. Of this increase, $183 million would go to Chapter 1 Grants to Local Education Agencies, $3 million would be for State Administration, and $14 million would increase our support of Federal demonstration, evaluation, and technical assistance activities. This is our single largest program in the Department and represents almost 30 percent of our total budget.

We have already transmitted to the Congress a proposal to reauthorize Chapter 1 that takes advantage of what has been learned about providing the best possible services to educationally disadvantaged children. Our proposal would modify Chapter 1 by strengthening State and local accountability for program effectiveness, providing incentives for successful programs, targeting funds on children and schools with the greatest need, encouraging innovation and effective practices, and furthering parental involvement. The proposal would also address problems associated with the Felton decision by establishing several mechanisms to help LEAs comply with the requirement to provide equitable services to private school children.

For bilingual education, we are requesting $143 million, the same amount appropriated in 1987 but $10 million more than in 1986. In 1988, our top priority in Bilingual Education is to increase local districts' discretion to design programs that respond to the needs of their local school populations. This policy will result in improved services to children because parents, teachers, and local officials would be allowed the discretion and judgment to select the best teaching methods for their areas.

The Department's commitment to the fight against adult illiteracy is reflected in our request of $130 million for adult education programs. This request is the highest level of funding ever proposed for this program and is almost 23 percent higher than the 1987 appropriation of $106 million. We believe that a substantial contribution to our national competitiveness will be achieved by

the teaching of basic academic and literacy skills at the adult level. This proposed increase complements the $200 million increase proposed for Chapter 1, to expand remedial and basic skills instruction to school-age children.

Included in the increase for Adult Education is $2 million to fund--for the first time in over a decade--Research, Development, and Evaluation. These funds will enable us to begin to look into some of the most pressing issues in adult education, such as the nature and extent of illiteracy in the United States, cost-effective means of reaching the target population, and use of innovative teaching approaches such as computer-based adult learning.

Our budget also reflects our commitment to improve the overall quality of education at all levels through flexible block grants and teacher training. Our request for Chapter 2 of the Education Consolidation and Improvement Act totals $529.3 million. Funding for the Chapter 2 State block grant, which has proven to be a useful and popular resource in promoting educational excellence at the State and local levels, would be maintained at its current level of $500 million. As part of our ECIA reauthorization proposals, we would refocus the Chapter 2 programs to provide a more useful vehicle for supporting the reform efforts emanating from the States.

The improvement of teaching at all levels is one of today's most critical education tasks. To this end, the Department is proposing the Christa McAuliffe Teacher Training and Improvement Act, with funding of $80 million in 1988. The proposed program would broaden the existing Science and Mathematics Education program so that funds could be used to improve teaching in all academic disciplines. This more flexible authority would provide funds for inservice training to improve subject matter competence and to improve teaching and administrative skills. The program also would support efforts to attract and train persons outside the teaching profession who wish to begin teaching, and to retrain teachers who wish to move into new subject areas.

The Administration is dedicated to fighting for a drug-free America, and part of this commitment is ridding our schools of drugs. In 1988, $100 million is requested for the Drug-Free Schools and Communities program. These funds will help States and localities develop drug education programs, provide training to school officials, help colleges and universities get drugs off campuses, and support a variety of research and information efforts.

Also before you today is our request to eliminate Federal support of vocational education. In developing our 1988 budget, we had to find ways of making necessary savings while maintaining or increasing support for programs in which the Federal investment is essential. Elimination of Department of Education funding for vocational education in no way proposes an end to such services. On the contrary, it recognizes that States and localities for years have provided the overwhelming share of financial support for vocational education programs. Indeed, over the last 20 years the non-Federal share of all public expenditures for vocational education has increased from 71 percent to more than 92 percent, and we expect that States and localities will continue to increase their investment. Our proposal also recognizes that funding for job

training comes from a number of other sources: The Department of Labor, for example, spends about $3.2 billion on job training programs, and private corporations spend $30-$40 billion annually on training programs for their employees. In view of the near-self-sufficiency of most States in vocational education, the magnitude of other sources of job training funds, and the necessity of protecting higher priority programs in which the Federal contribution is essential, we are not requesting vocational education funding for 1988.

We are again seeking the elimination of Impact Aid "b" payments, that is, payments to school districts for children who live on, or whose parents work on, Federal property. The Impact Aid program provides grants to local educational agencies to compensate them when Federal activities result in increased enrollments or loss of local revenues; however, "b" children do not represent a burden to their school districts and should not continue to be a Federal responsibility. Impact Aid funds in 1988 would be focused on districts that are more heavily burdened by the effects of Federal activities , that is, on school districts with so-called "a" students. These students live on and their parents work on Federal property, and, thus, they do not generate local property tax revenues. Our budget proposes to fund these payments at $533 million, the same level as in the enacted 1987 appropriation, but under a revised formula. This formula would provide a sliding scale that would still allow higher rates of payment for the more heavily impacted districts, but provides several more stages at which payments would decrease, avoiding the current abrupt transition from full funding, or nearly full funding, to a much smaller amount.

I have discussed the highlights of the budget proposals you have before you this morning. We would like to insert for the record more detailed statements by my colleagues who administer these programs. We would be happy to answer any questions you may have.

Compensatory Education for the Disadvantaged

I am pleased to appear before this Committee to discuss the 1988 budget request for Compensatory Education for the Disadvantaged. We are requesting a total of $4.1 billion -- a $200 million increase over the 1987 appropriation. This reflects the Administration's continuing commitment to help States and localities meet the special educational needs of disadvantaged children. Secretary Bennett has placed the highest priority on programs that benefit the educationally disadvantaged. This program makes up the largest budget item within the Department, accounting for 29 percent of our 1988 budget request, compared to 20 percent of our 1987 appropriation; and despite the budgetary constraints we face, we are providing for an increase of over 5 percent.

In developing our proposal, we have consulted widely and thought carefully in order to take advantage of what has been learned and to provide the best services possible to educationally disadvantaged children. In our examination of Chapter 1 reauthorization issues, several basic points about the existing Chapter 1 programs have become clear:

- First improving the education of disadvantaged children is one of the most important Federal roles in education.

- Second, Chapter 1 is an important tool for helping disadvantaged children learn. Research shows that Chapter 1 has had some success in raising achievement levels -- but it can and should do better.

- Third, we must recognize that no matter how good a program Chapter 1 is or how much is spent on it, it will never be the determining factor in children failing or succeeding. The keys will always be discipline, character, leadership, high expectations, teaching basic skills, and a sound curriculum.

Grants to Local Educational Agencies

Under our reauthorization proposal, Chapter 1 Grants to Local Educational Agencies (LEAs) will remain the primary vehicle for providing compensatory education services to the disadvantaged. For 1988 we are requesting $3.6 billion for this program -- a $183 million increase over the 1987 level. Our legislative proposal includes several major features:

- First, it will provide incentives for rewarding success by requiring each State to use one percent of its LEA grant funds for additional grants to reward excellence in Chapter 1 programs. School districts that operate successful programs could use funds awarded by the State to extend their programs to more students or more schools.

- Second, our proposal would target resources more efficiently on school districts, schools, and children most in need of assistance so that funds are not diluted. This would be accomplished in three ways:

  1. Proposing two small, but important, changes to the current distribution formula for LEA grants in order to funnel more resources to school districts with the highest concentrations of poor children. Five percent of LEA grant funds would be allocated through the existing Concentration Grant formula. This would direct more funds to LEAs in counties with at least 5,000 poor children or in which poor children make up at least 20 percent of all children in the county--in other words, areas that have the greatest need. The remaining funds for LEA grants would be allocated based on the number of poor children in excess of two percent of the total number of poor children in a school district. This would also have the effect of redirecting funds towards districts with more severe needs. These proposals would accomplish important shifts in resources without eliminating existing LEA grant recipients.

  2. Improving the targeting of funds within school districts by establishing a general principle that Chapter 1 funds should be concentrated on the poorest one-third of a district's school attendance areas.

3. Clarifying that LEAs must select children most in need to receive Chapter 1 services. The current law permits LEAs merely to select some of the children most in need of assistance while also serving less needy children.

Third, we would place increased emphasis on program accountability and results by requiring State educational agencies (SEAs) to assess local programs at least once every three years to determine their educational effectiveness, as well as their performance in providing equitable services to private school children. In cases where the SEA finds that a program is ineffective or inequitable, we would, for the first time, require the SEA to take necessary measures to correct deficiencies in the local program. Specific remedies would be decided by the SEA, not the Federal Government.

Fourth, our proposal would increase choice and parental involvement by: (1) permitting LEAs to implement a compensatory education certificate (CEC) program if they find that such a program would provide the best means of serving the needs of educationally deprived children; (2) authorizing SEAs to mandate CEC programs in school districts that operate ineffective or inequitable Chapter 1 programs; (3) providing more specific parent consultation requirements; and (4) supporting model parental involvement demonstration projects with Federal demonstration funds.

Fifth, we would encourage innovation and effective practices by creating a single authorization to support program evaluation, technical assistance, and program innovation activities at the Federal level. Funds for innovation, for example, would support grants to LEAs, SEAs, and other recipients for nationally significant demonstration and recognition programs. Also, schoolwide projects would be encouraged -- in line with the effective schools research -- by loosening the current poverty threshold and matching requirements.

Sixth, our proposal would address problems associated with the Felton decision by establishing several mechanisms for LEAs to comply with the requirement for providing equitable services to private school children. These mechanisms would include: (1) authorizing LEAs to implement compensatory education certificate programs; (2) requiring SEAs to step in and correct deficiencies in local programs that do not provide equitable services to private school children; and (3) authorizing Federal support for projects that demonstrate promising approaches for dealing with Felton.

State Agency Programs

For the Chapter 1 Migrant program, we are requesting $265 million for 1988 -- the same as the 1987 level. Our reauthorization proposal would restructure the program so that currently migrant children are given a clear priority over formerly migrant children in the receipt of services and are weighted more heavily than formerly migrant children in the formula allocations to the States. This change in the formula would target funds to the States that are needier because they have greater proportions of children migrating or just beginning to settle into an area. In the provision of services, we would require States to give priority to currently

migratory school age and preschool children before serving formerly migrant children. These changes would restore the emphasis in the migrant program to serving children who are most in need of additional education assistance.

We propose to incorporate the Chapter 1 Handicapped program into the Education of the Handicapped Act (EHA). The Chapter 1 authority predates the Education of the Handicapped Act of 1975; it is now obsolete. Our change recognizes that both programs provide similar services and should be thought of as a unit. The program would receive $150 million, the same as the 1987 level, under our 1988 request.

We are requesting $32 million for the Chapter 1 Neglected and Delinquent program, the same as the 1987 level. Our reauthorization proposal would permit States to use up to 10 percent of the funds they receive for this program to establish programs for helping students who leave a State facility to make a successful transition to the regular classroom. A study of the program revealed that 90 percent of school-age inmates failed to complete even one semester of schooling after their release. Thus, any progress that the Neglected and Delinquent program made was largely negated because of inadequate follow-up. There is clearly a need for additional State efforts to ease students' transition from correctional institutions to the regular classroom.

State Administration

Our legislative proposal recognizes what your Committee has done for the past five years: It establishes a separate authorization of appropriations for State administration, including project assessment and data collection requirements of Chapter 1. Our 1988 request is $40 million, a $3 million increase from the 1987 level. Once a specified minimum is met, each State would receive an amount that is proportionate to its total Chapter 1 allocation.

Demonstration, Evaluation, and Technical Assistance

As I mentioned earlier, we are also proposing to create a single authorization for Federal demonstration, evaluation, and technical assistance activities, so that the authorization for these activities would no longer depend on special language in the appropriations process. For 1988, we are requesting $20 million, an increase of $14 million over the 1987 level. There is much that we do not know -- but should -- about existing State and local compensatory education programs. We also believe that there are promising ideas that should be tested and proven techniques for reaching disadvantaged children that should be disseminated. Improving our knowledge about what works, and for whom, and disseminating information about successful practices are central to any strategy for improving the education of disadvantaged children. These represent appropriate activities for the Federal Government. The 1988 funds would be used for Grants to SEAs and others for nationally significant demonstrations; for recognition programs; for studies of program services, funds distribution, and effects on students; for technical assistance to States and LEAs; and for other program improvement activities.

HEP and CAMP

We request no funds for the High School Equivalency program (HEP) and the College Assistance Migrant program (CAMP). They are costly to operate and duplicate services provided by other Federal programs at a much lower cost. For 1987, we are proposing rescissions for HEP and CAMP that would terminate funding for these programs.

My colleagues and I will be happy to respond to any questions you may have.

Special Programs

I appreciate this opportunity to appear before you to present the fiscal year 1988 budget request for the Special Programs account. The request for this account totals $784.3 million, $100 million less than the 1987 revised request level and $152.6 million less than the 1987 enacted level.

The Special Programs account includes three State formula grant programs with an array of purposes and several smaller discretionary grant programs designed to give Federal assistance in areas of national concern or to address needs of particular segments of the population.

Three of the four major programs in this account -- Chapter 2 of the Educational Consolidation and Improvement Act, a proposed Christa McAuliffe Teacher Training and Improvement Initiative, and the Magnet Schools Assistance program -- support efforts in the States and local communities to improve educational quality. These three programs would be funded at $684.3 million in 1988. The other major program in this account -- Drug-Free Schools and Communities -- is an essential component of a comprehensive strategy to reduce the demand for and use of drugs throughout the Nation and in getting drugs out of the Nation's schools. Funding for Drug-Free Schools and Communities is requested at $100 million in 1988.

Our budget also proposes termination of direct Federal support for a number of categorical programs that duplicate other activities, are eligible for funding from other sources, have outlived their usefulness, and in some cases are not well designed to meet their objectives.

Chapter 2 of the Education Consolidation and Improvement Act

Our request for Chapter 2 of the ECIA totals $529.3 million. Most of these funds flow directly to State governments and local school districts where they may be used to respond directly to State and local needs. Chapter 2 also provides for a limited set-aside of discretionary funds to be used by the Secretary to address broad national priorities.

State Block Grants

The Chapter 2 Block Grant continues to be a high Administration priority. The 1988 budget request would maintain funding for the Block Grants at $500 million.

This program provides aid to States to improve the quality of elementary and secondary education for children in public and private schools. Its focus is upon general excellence in education, rather than federally prescribed categorical activities.

Authorization for ECIA extends through fiscal year 1987. The Administration's reauthorization proposal will make Chapter 2 a more useful vehicle for supporting the reform efforts emanating from the States.

Secretary's Discretionary Fund

The budget request for 1988 proposes to maintain the Secretary's Discretionary Fund at the 1987 enacted level of $29.3 million. These funds will be used by the Secretary of Education for activities that assist State and local educational agencies in improving elementary and secondary school programs. Five programs are currently mandated by the legislation: Inexpensive Book Distribution, Arts in Education, Alcohol and Drug Abuse Education, Law-Related Education, and the National Diffusion Network. It is the Department's current intention to fund the mandated programs, with the exception of Alcohol and Drug Abuse Education, at approximately their 1987 levels. Precise levels will be determined in response to funding needs and priorities in 1988. No funds are proposed for Alcohol and Drug Abuse Education under the Secretary's Discretionary Fund because alcohol and drug abuse education activities are now authorized by the new Drug-Free Schools and Communities Act. The Department's ECIA reauthorization bill, while maintaining authorization for the other four mandated programs, would remove their statutory funding levels, in order to give the Secretary more flexibility to target funds where they are most needed.

Christa McAuliffe Teacher Training and Improvement

The proposed Christa McAuliffe Teacher Training and Improvement Act would amend Title II of the Education for Economic Security Act, which authorizes the existing Science and Mathematics Education program, so that funds could be used to improve teaching in all academic disciplines. The proposed program would eliminate many of the burdensome requirements and funding set-asides that hamper current program operations. This new program also would replace the current Territorial Teacher Training, Leadership in Educational Administration, and Christa McAuliffe Fellowship programs. Enactment of the more comprehensive Christa McAuliffe Teacher Training and Improvement Act would make these narrow categorical authorities redundant and unnecessary. For 1988, $80 million is requested for the new Christa McAuliffe Teacher Training and Improvement program, the same as the 1987 enacted level for Science and Mathematics Education. Of this amount, $64 million would be used for State grants and $16 million for National programs.

Magnet Schools Assistance

For 1988, the Department is requesting $75 million for Magnet Schools Assistance, the same as the 1987 enacted level. These funds would be used for second-year continuation grant awards.

The Magnet Schools Assistance program provides grants to local educational agencies for use in magnet schools that are part of a desegregation plan approved by a court or the Department's Office for Civil Rights. Courses of instruction within magnet schools must strengthen students' knowledge of math, science, history, English, foreign languages, art, or music, or improve their vocational skills.

Magnet schools are an effective means of achieving voluntary desegregation, promoting quality education, and increasing choices available to parents and students. We believe that these factors justify continued funding for Magnet Schools Assistance at the $75 million level.

Drug-Free Schools and Communities

Drug-Free Schools and Communities is the other program in this account for which 1988 funding is proposed. In 1988, $100 million is requested, the amount of the President's initial request for 1987. The requested amount will continue efforts, begun with 1987 funds, to help States and localities develop drug programs, provide training to school officials, help colleges and universities get drugs off campuses, and support a variety of research and information efforts. The fiscal year 1987 appropriation of $200 million will be available to the States during the first two years of the Drug-Free Schools and Communities program and provides ample start-up funding for planning and one-time materials purchases. The Department's request of $100 million will provide additional support for the program in fiscal year 1988.

Of the amount requested, $82.2 million would be used for State grants and $17.2 million for National programs. State grants primarily support programs at the local school and community level; National programs support programs in institutions of higher education, a network of regional centers, and other Federal activities.

Terminations and Rescissions

The Special Programs account also includes a number of categorical programs that duplicate other activities, have outlived their usefulness, and in some cases are not well designed to meet their objectives. These programs generally address narrow federally perceived priorities which may not be relevant to State and local needs. Furthermore, the programs impose costly administrative and paperwork burdens on State and local schools. These activities include the Women's Educational Equity, Training and Advisory Services, General Assistance to the Virgin Islands, Ellender Fellowships, Follow Through, Territorial Teacher Training, Leadership in Educational Administration, and Christa McAuliffe Fellowship programs. The budget proposes to terminate direct Federal support for all of these activities through a 1987 rescission of $52.5 million. The budget also proposes to rescind $4.4 million in unobligated balances remaining from prior year appropriations for the Excellence in Education program, which was not funded in 1987.

My colleagues and I will be happy to respond to any questions you may have.

Statement of Lois Bowman

We appreciate this opportunity to appear before you to discuss the 1988 appropriation request for Impact Aid. The President's Budget contains a request of $548 million for Impact Aid program activities under Public Law 81-874 and Public Law 81-815. This request recognizes the urgent need to curtail expenditures in order to control the Federal deficit. At the same time, it maintains the Federal Government's commitment to compensate school districts for the cost of educating children when enrollments and the availability of revenue from local sources have been adversely affected by Federal activities.

The request includes $543 million for Maintenance and Operations activities under Sections 2 and 3, and $5 million for Construction projects. The 1988 request is $152 million less than the 1987 revised request level and $169.5 million less than the 1987 enacted level. Most of this decrease reflects the Administration's decision to propose the elimination of payments for "b" children, who reside or whose parents work on Federal property. The presence of these children creates no significant burden for local school districts. In keeping with the policy of focusing Federal aid on those school districts that are the most heavily burdened by the effects of Federal activities, payments will be made only on behalf of the so-called "a" students, who live on and whose parents work on Federal property and thus do not generate local property tax revenues.

Maintenance and Operations

Of the $543 million requested for Maintenance and Operations, an amount of $533 million is requested for Section 3(a), the same amount as the 1987 appropriation. These funds will be used for making payments for children who reside on and whose parents work on Federal property or are on active duty in the uniformed services.

For 1988, a more equitable distribution formula is proposed for payments under this section. This revised formula would continue to provide higher rates of payment for districts with higher proportions of federally connected children. However, the proposed formula contains a sliding scale, with several stages at which payment rates would decrease. This is instead of a formula like the one for 1987 payments which results in the abrupt transition from full or nearly full funding to less than half of that amount when a district has fewer than 15 percent "a" children. The exception to these funding rates would be for payments on behalf of children who reside in federally subsidized, low-rent housing. These payments would continue to be made at reduced rates--up to a maximum of 15 percent of entitlement--because the presence of these children in a school district is generally not a direct result of Federal activities. We expect to make Section 3(a) payments to approximately 800 districts in 1988 under this proposal.

In 1988, the Department proposes to earmark $10 million of Section 3 funds for increased payments to districts eligible under Section 3(d)(2)(B). These are districts that are particularly heavily burdened by the presence of federally connected children, that meet specific criteria in the program statute, and that do not have sufficient funds to provide a level of education equiva-

lent to comparable districts in their State. The level of funds earmarked for 1988 payments under this provision is an amount that has generally been sufficient to meet all claims for these payments for "a" children. In line with the termination of payments for "b" children, Section 3(b) children will not be counted for eligibility or payments under Section 3(d)(2)(B) in 1988.

Also, in 1988, the Department proposes to restore a provision requiring a $5,000 minimum payment under Section 3. This minimum, which was in effect in fiscal years 1982-84, eliminates small payments to districts with very few federally connected children. Through the minimum payment requirement, funds are reserved for only those districts experiencing actual financial burdens due to Federal activities.

The $10 million requested for Section 2, which is $12 million less than the enacted 1987 appropriation, is expected to be sufficient for payments at 100 percent of entitlement in 1988, given changes made by proposed regulations that will affect eligibility and payment amounts. The changes in the implementation of Section 2 contained in these regulations reflect changes in State school finance practices in recent years, among other things. We estimate that Section 2 payments will be made to about 120 districts in 1988 whose partial loss of tax base due to the acquisition of property by the United States Government has resulted in a continuing financial burden.

Disaster Assistance

For fiscal year 1988, no new budget authority is requested for Disaster Assistance. This a decrease of $10 million from the 1987 appropriation. Of the $59,570,000 made available for this activity in 1986 and 1987 through appropriations and a transfer of funds from another program, approximately $15 million is expected to be carried over into 1988. This amount should be sufficient to fund applications submitted in 1988. Because the level of funds required for disaster assistance fluctuates greatly from year to year, the budget proposal includes a request that funds remain available until expended. This provision, first implemented by the 1984 supplemental appropriation act, increases the Department's flexibility to meet the varying levels of demand for disaster assistance.

Construction

Construction funds are requested for 1988 only for awards under Sections 14(a) and 14(b). For this activity, the request is $5 million, which is $4.25 million less than the appropriation for Sections 14(a) and 14(b) for 1987, and $17.5 million less than the 1987 amount for all construction activities.

Sections 14(a) and 14(b) authorize construction grants to school districts that serve children residing on Indian lands. These districts appear to have the greatest need for new or additional facilities and the least funds available from other sources. Construction projects that would be assisted under Sections 5 and 14(c) will have to be postponed until the Federal deficit is under control. Grants under these sections are generally for only a small proportion of the total cost of the projects. Applicants

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may be able to find funds from other sources enabling them to complete their projects without Federal assistance.

For Section 10, which authorizes the repair and construction of facilities to serve children residing on Federal property, funds have been made available through the Department of Defense as well as the Department of Education since 1984. Although our request includes no funds for Section 10 construction, the Department of Defense budget proposal for 1988 includes approximately $20 million for Section 10 activities.

Fiscal Year 1987 Rescission and Supplemental Language

A rescission of $17.5 million in Construction funding is proposed for 1987, leaving $5 million for school construction awards under Sections 14(a) and 14(b). This proposal is part of the President's program to eliminate unnecessary Federal spending, to help control the Federal deficit, and to direct Federal support to priority programs. No new funds would be made available for projects under Sections 5, 10, and 14(c). Unobligated funds carried over from prior years will be available to fund a limited number of projects under those sections.

Under the rescission proposal, the $5 million remaining from the 1987 appropriation would be available to fund projects under Sections 14(a) and 14(b). In addition, supplemental language is being proposed to make approximately $3.8 million appropriated under the 1983 Jobs Bill available for projects under Sections 14(a) and 14(b) in 1987. Most of these funds were originally obligated for construction projects eligible under the terms of the Jobs Bill. In some cases, more funds were obligated than were needed to complete the construction projects. By the time the excess funds were recovered, it was not possible to use them to meet the purposes of the Jobs Bill.

My colleagues and I will be happy to respond to any questions you may have.

STATEMENT OF CAROL PENDAS WHITTEN

I am pleased to appear before the Committee today to testify on the fiscal year 1988 budget request for Bilingual Education.

The budget request for Bilingual Education demonstrates the Department's strong commitment to ensuring that limited English proficient children are provided the special instructional services they need to prepare them to participate fully in our society. Even though the Department's overall budget for 1988 has been reduced to meet deficit reduction requirements, the request for Bilingual Education is $143 million, the same as the 1987 appropriation and $6 million more than in 1986.

In 1988, the Department will continue to consolidate the gains and program improvements it achieved, principally through the new program regulations published in June, 1986. These regulations drew attention to the amount of discretion local schools have under current law to determine the extent of native language use in transitional bilingual education projects. The regulations also

sought to ensure that limited English proficient children learn English as quickly as possible so that they can participate effectively in the school's regular program. The new regulations also emphasize statutory requirements for parent involvement and building local capacity to contiunue to operate programs once Federal funding is reduced or no longer available.

In keeping with Secretary Bennett's Bilingual Initiative, the top priority for the Bilingual Education program in 1988 is increasing the discretion of schools to design programs to respond to the needs of local children. Legislation was recently transmitted to the Congress to remove the 4 percent cap on funding for special alternative instructional programs and the requirement that 75 percent of funds available for Part A, Bilingual Programs, be spent for transitional bilingual education projects. This will allow the Department to consider applications on the basis of quality without regard to the specific instructional method proposed. Appropriation language is also proposed to accomplish this goal. I believe that this policy will result in improved services for these children, because parents, teachers, and local school officials are in a far better position than the Federal Government to select the appropriate instructional method.

In addition to the legislation already submitted, the Department is studying a number of other changes that could improve the Bilingual Education program. If the House Education and Labor Committee proceeds with its plans to reauthorize the Bilingual Education Act this year, we expect to work closely with them in their efforts to create a more effective Bilingual Education program.

Bilingual Programs

For Part A, Bilingual Programs, $99.2 million is requested. This is the same as the 1987 appropriation and $8.2 million more than the 1986 level after the sequester. Part A provides grants, primarily to local educational agencies, for services to limited English proficient students. Of the seven Part A activities, five would be funded at their 1987 appropriation levels. In the case of transitional bilingual education and special alternative instructional programs, all continuation grants would be made, but funding for new projects would be shared between the two activities. Applicants would be selected on the basis of quality and need, without regard to the instructional method proposed.

Support Services

Under Part B, Support Services, $10.4 million is requested, the same as the 1987 appropriation. Part B provides grants to State educational agencies for data collection and a variety of technical assistance activities. This part also provides contracts for evaluation assistance centers, research, and a national clearinghouse. Within Part B, all activities would be continued at the 1987 levels.

Training Grants

Under Part C, Training Grants, $33.6 million is requested, the same level as the 1987 appropriation. The request for all five training activities is the same as the 1987 appropriation. Under

Part C, grants are made for educational personnel training, training development and improvement, fellowships, and short-term training institutes. Contracts are also awarded for sixteen regional multifunctional resource centers.

I believe that the new program regulations, which were issued in June of last year as part of Secretary Bennett's Bilingual Initiative, have already led to significant increases in program effectiveness. I am also confident that if our 1988 budget policy is enacted, the Bilingual Education program can become still more effective in meeting the needs of limited English proficient children.

My colleagues and I would be happy to respond to any questions you have regarding our 1988 budget request for Bilingual Education.

Immigrant and Refugee Education

I am pleased to appear before the Committee today to testify on the fiscal year 1988 budget request for Immigrant and Refugee Education. This account includes two separate programs: Immigrant Education and Refugee Education.

Authorized by Title VI of the Education Amendments of 1984, the Immigrant Education program provides assistance to local educational agences for services to immigrant children who have been enrolled in U.S. schools for three years or less. Any child born outside the United States may be counted for this program except for children of aliens who are in the U.S. for a temporary purpose and children of U.S. citizens born abroad. Consequently, children eligible for the Refugee Education program described below may also be counted by the Immigrant Education program. In order to participate, districts must enroll 500 recent immigrant children or these students must represent three percent of total enrollment. Grants are made to States which in turn transfer funds to eligible school districts.

The Refugee Education program, authorized by the Refugee Act, was recently transferred to the Department of Education from the Department of Health and Human Services by the Refugee Assistance Extension Act of 1986. Only those children officially designated as refugees by the Immigration and Naturalization Service upon entry into the U.S. may be counted. Since 1981, the annual refugee flow has been declining. In 1986, 82,356 students were counted under the Refugee Education program. Of these, 52,909 were also counted under the Immigrant Education program. Approximately 14 percent of participating school districts enroll only a single refugee child and receive awards of less than $200. In 1985, just over half the districts received a grant of more than $1,000. This program is similar to Immigrant Education in that grants are made to the States which in turn transfer funds to eligible districts.

No funding is included for either Immigrant Education or Refugee Education in the fiscal year 1988 request. The Department also proposes to rescind the fiscal year 1987 appropriations for these programs.

Neither Immigrant Education nor Refugee Education programs require that specific services be provided to eligible students. In both cases, schools are free to use these funds for any purpose related to the education of eligible children, even if no supplementary services are provided. Consequently, both programs constitute general aid to school districts and, as such, are not effective vehicles for meeting the special needs of eligible students. Assistance is available under other Department programs to serve these children. Funding under Chapters 1 and 2 of the Education Consolidation and Improvement Act of 1981 and Title VII of the Elementary and Secondary Education Act is sufficient to provide services to immigrant children who need them.

My colleagues and I would be happy to respond to any questions you have regarding our 1988 budget request for Immigrant and Refugee Education.

Statement of John Pucciano

We appreciate this opportunity to discuss the fiscal year 1988 budget request and the fiscal year 1987 rescission proposal for vocational and adult education. These programs form a small portion of overall State, local, and private efforts designed to prepare a skilled and literate work force, which can support our Nation's economic growth and industrial competitiveness.

For fiscal year 1988, as part of a gradual two-year phaseout, we are not requesting Federal appropriations for vocational education; for adult education, we are requesting $130 million. As you can see on Chart 1, the 1988 request is a decrease for vocational education of $449.6 million from the 1987 revised request, which includes a proposed rescission of $432.3 million. The 1988 request for adult education is an increase of $24 million over the 1987 appropriation.

Vocational Education

The issue before us today is not the value of vocational education. Clearly, vocational education can play an integral role in the overall education of individuals, and particularly at the postsecondary level, can make a major contribution to our efforts to improve America's productivity and industrial competitiveness.

Neither is the issue that of who pays for vocational education. At the bottom line, it is the American taxpayers who foot the bill, whether their tax dollars are channeled into Federal, State, or municipal treasuries.

The important issue is whether there is a continuing Federal role in vocational education. Before discussing further our budget request, I would like to give you an overview of Federal and non-Federal spending for vocational education over the last 20 years. During this period, an important role of the Federal Government has been to encourage State and local governments and the private sector to respond to issues of national concern. Federal involvement in vocational education -- through legislation, regulation, and appropriations -- has demonstrably fulfilled this role.

Between 1966 and 1985 the non-Federal share of all public expenditures for vocational education has increased from 71 percent to more than 92 percent. While Federal expenditures for vocational education during this period increased from $252 million to $672 million, a growth of 167 percent, State and local funding increased from approximately $807 million to well over $8 billion, an increase of nearly 1,000 percent.

The Federal Government has encouraged State and local governments not only to increase non-Federal spending, but also to explore a wide variety of funding alternatives to address the needs of vocational education. The States and localities have responded to this encouragement dramatically. I believe that since most States have reached or are approaching self-sufficiency in vocational education, this Federal role has been fulfilled. It is under these conditions -- recognizing the 12 to 1 overmatch of Federal funding for vocational education, the need to meet deficit reduction targets, and the desire to protect higher priority programs -- that the Administration has decided to propose eliminating the Federal share of vocational education expenditures.

Federal support for vocational education will continue through direct funding of vocational rehabilitation, adult basic education, student financial aid, and Labor Department programs authorized by the Job Training Partnership Act.

Adult Education

For Adult Education, we are requesting $130 million in 1988. This is an increase of $24 million from the 1987 level. Under this proposal, adult education grants to States would be funded at $128 million, an increase of $22 million over 1987. This proposed increase reflects the Administration's strong commitment to the fight against adult illiteracy, even in a period of fiscal restraint. The elimination of adult illiteracy and improvement of basic skills throughout our workforce will make a substantial contribution to our national competitiveness. This proposed increase complements the $200 million increase we have proposed for the Chapter 1 program, which also provides basic literary instruction and prevents children from becoming adult illiterates. The increased funding level will allow States to pursue more extensive literacy projects, and we estimate that about three million persons will be reached, approximately 400,000 more than the number served at present. Continued State, local, private sector, and volunteer support for adult literacy programs, in connection with the President's highly successful Adult Literacy Initiative, which works to encourage private-sector and volunteer participation in literacy efforts around the Nation, may add significantly to the number of persons served.

Finally, we are requesting $2 million for adult education research, development, and evaluation as authorized by section 309 of the Adult Education Act. This $2 million request for national projects -- which would provide the first appropriations in this area in more than a decade -- will enable us to begin to look into some of the most pressing issues in adult education, such as: information on the nature and extent of the illiteracy problem, the most cost-effective means of reaching the target population,

and the potential use of innovative approaches such as computer-based adult learning programs.

1987 Rescissions

Our 1987 revised request for vocational education is $449.6 million, which reflects a proposed rescission of $432.3 million from the 1987 appropriation. This would be the first step in a planned phaseout of direct Federal support for vocational education. The proposed rescission would come entirely from programs authorized under the Perkins Act; the permanent appropriation under the Smith-Hughes Act would not be affected.

For the Basic State Grants program in 1987, a rescission of $389 million is proposed. At the revised request level of $426 million, States would be required to use all Basic Grant funds, except those funds which are set aside for administration, to serve the six special populations named in the Perkins Act, thus maintaining funding for these populations at approximately the 1986 level. The set-aside for the Indian and Hawaiian natives program would be reduced to $6.6 million. Chart 2 provides additional information about the distribution of Basic Grant funds under our proposed rescission.

Additionally, we propose to eliminate all 1987 funding for Community-Based Organizations, Consumer and Homemaking Education, and Bilingual Vocational Education, which received appropriations of $6.0 million, $31.6 million and $3.7 million, respectively. Considerable funding for all of these activities is available from other sources, and States may use their Basic Grants funds to support these activities if they so desire. As one example, Federal funding for Consumer and Homemaking Education is currently overmatched 17 to 1 from State and local sources. Other proposed rescissions include $500,000 from State Councils, returning funding for this activity to slightly more than the 1986 funding level. This level will still enable the Councils to complete their responsibilities under the Perkins Act. To prevent the initiation of new demonstrations at this time, $1.5 million would be rescinded from National Demonstration programs.

At this time, Mr. Chairman, my colleagues and I will gladly respond to any questions you may have.

INTRODUCTION OF ASSOCIATES

Mr. CARNES. Thank you very much, Mr. Chairman. It is a pleasure to appear again before you and this committee. Let me introduce my colleagues. First on my immediate right is John Pucciano, who is Acting Assistant Secretary for Vocational and Adult Education. On my immediate left is Lois Bowman, Acting Assistant Secretary for Elementary and Secondary Education. To her left is Carol Pendas Whitten, Director of the Bilingual Education Programs.

If I could, Mr. Chairman, I will submit my statement for insertion in the record but will summarize some of the highlights.

Senator CHILES. Fine.

OPENING STATEMENT

Mr. CARNES. I am pleased to appear before this committee to discuss our 1988 budget proposals in the areas of elementary and secondary education, bilingual education, and vocational and adult education. The requests for these programs total over $5.7 billion, over 40 percent of our entire budget. These programs meet the highest priority for Federal education and spending. They are programs in which there is a clear Federal responsibility, which enhance opportunities for the poor, disadvantaged, and limited English-speaking students, focus on the critical early years of schooling, improve education quality primarily through teacher training and flexible block grants, and teach basic academic and literacy skills.

CHAPTER 1

Chapter 1 of the Education Consolidation and Improvement Act, the largest Federal program at the elementary and secondary level, provides supplementary education services for children who are economically and educationally disadvantaged.

In 1988 we are proposing $4.1 billion for chapter 1, which is an increase of $200 million over the 1987 enacted level. Of this increase, over $180 million of it would go to chapter 1 grants to local educational agencies. We have transmitted to Congress a proposal to reauthorize chapter 1 which takes advantage of what has been learned about providing the best possible services to educationally disadvantaged children.

Our proposal would modify chapter 1 by strengthening State and local accountability for program effectiveness, providing incentives for successful programs, targeting funds on children and schools with the greatest need, encouraging innovative and effective practices, and furthering parental involvement.

BILINGUAL EDUCATION

For bilingual education, we are requesting $143 million, $10 million more than in 1986. In 1988 our top priority in bilingual education is to increase local districts' discretion to design programs that respond to the needs of their local school populations. This policy will result in improved services to children because parents, teachers, and local officials will be allowed the discretion to select the best teaching methods for their areas.

ADULT EDUCATION

In adult education, as you have pointed out, Mr. Chairman, we are increasing the funding by $24 million, which is an increase of 23 percent. I believe that a substantial contribution to our national competitiveness will be achieved by teaching basic academic and literacy skills at the adult level. This proposed increase complements the $200 million increase I already mentioned in chapter 1.

Included in the increase for adult education is $2 million to fund, for the first time in over a decade, research, development, and evaluation. Data are sorely lacking in the area of adult literacy and need to be provided.

BLOCK GRANTS

Our budget also reflects our commitment to improve the overall quality of education at all levels through flexible block grants and teacher training.

The Block Grant Program, I might mention, Mr. Chairman, is one of the most popular and successful of all of the Department's programs. Whenever we go out to visit schools, school districts, and States, we talk to superintendents and principals. For them, this money can make a critical margin of difference in their ability to respond to the needs of their own particular institutions.

Funding for the block grant would, therefore, be maintained at its current level of $500 million.

TEACHER TRAINING

The improvement of teaching at all levels is one of today's most critical education tasks. To this end, the Department is proposing the Christa McAuliffe Teacher Training and Improvement Act with funding of $80 million in 1988.

I believe I mentioned yesterday that the current Teacher Training Program that exists in math-science would not have allowed Christa McAuliffe to participate. We think that that is a limitation of the program, and the program should be broadened sufficiently to allow participation by all kinds of teachers in different disciplines.

DRUG-FREE SCHOOLS

The administration is dedicated to fighting for a drug-free America, and part of this commitment is ridding our schools of drugs. In 1988, as you know, we have requested $100 million, which is the same as our 1987 request.

VOCATIONAL EDUCATION

Also before you is our request to eliminate support for vocational education. In developing our budget we had to find ways to make necessary savings while maintaining or increasing support for programs in which the Federal investment is essential.

Elimination of Department of Education funding for vocational education in no way proposes an end to such services. On the contrary, it recognizes that States and localities for years have provided the overwhelming share of financial support for vocational education. Indeed, over the last 20 years the non-Federal share of all public expenditures for vocational education has increased from about 70 percent to over 90 percent, and we expect this trend to continue.

IMPACT AID

We are again seeking elimination of impact aid "b" payments—that is, payments to school districts for children who live on or whose parents work on Federal property. The Impact Aid Program provides grants to local educational agencies to compensate them when Federal activities result in increased enrollments or loss of local revenues. However, so-called "b" children do not represent a burden to their school districts and should not be a Federal responsibility.

We do have a responsibility for "a" children. Impact aid funds in 1988 would be focused on districts that are more heavily burdened by the effects of Federal activity—that is, on school districts with so-called "a" students. These students live on and their parents work on Federal property, and thus they do not generate local property tax revenues.

Our budget proposal is to fund these payments at $533 million, the same as the 1987 enacted appropriation, but under a revised formula that is actually smoother in the way it allocates funds based on the concentration of such children. The formula provides a sliding scale that would ease disruptions and notch effects.

These are the highlights of the budget, Mr. Chairman, and I and my colleagues would be pleased to answer any questions you have.

Senator CHILES. Thank you. Senator Weicker, do you have an opening statement?

Senator WEICKER. No, thank you, Mr. Chairman.

DRUG-FREE SCHOOLS ACT

Senator CHILES. Mr. Carnes, the Drug-Free School Act requires that the Department coordinate its efforts with the Department of Health and Human Services in the administration of $6.8 million in Federal activity.

My understanding is the two agencies have reached an interagency agreement for the clearinghouse activities and the study mandated in the law. Why hasn't an interagency agreement been developed for $6.3 million in discretionary activities?

Mr. CARNES. On the Federal activities, you are quite right. We have transferred $500,000 to HHS for the clearinghouse, and the Department plans to award $5 million for the implementation of local programs. Applications for those funds are due June 24. Awards will be made in September. The remaining funds would then constitute slightly more than $1 million, which are available for discretionary purposes.

Senator CHILES. So you have an agreement on all but $1 million of the discretionary funds?

Mr. CARNES. If I could ask for someone on my staff to elaborate on what we will be spending. We do have $6.8 million in the Federal activity section of the funds; we do have agreements with HHS; and we are going to be awarding $5 million in grants by September.

Senator CHILES. I am just looking at this.

Mr. CARNES. Let me ask Mr. Corwin to talk about that.

Mr. CORWIN. We are required to transfer $0.5 million to HHS for the clearinghouse. We have gone ahead with that transfer.

Second, a study has to be coordinated with them. We are doing that coordination.

Beyond that, there really is no requirement for a joint operation of the Federal activities with HHS. We are in communication with them, we meet with them, but there does not have to be any sort of transfer or signoff of the remaining funds.

Senator CHILES. So you are saying that for all the discretionary activities, you do not think you are required to have any?

Mr. CARNES. Not for all of the operations.

Senator CHILES. The Secretary of Education, in conjunction with the Secretary of HHS, carries out Federal education and prevention activities on drug abuse. The Secretary should coordinate such drug abuse education and prevention activities with all appropriate Federal activities related to drug abuse.

When you have NIDA doing the same kind of thing, it would seem to me the right hand and the left hand would not be doing the same things.

Mr. CARNES. If I could elaborate on that, we are having coordination. What we do not have is a formal signoff from HHS for the things that we do. We are in contact with them. We do coordinate with them. Frequently throughout the administration we meet on drug issues and we also meet with NIDA on these issues, but we have not gotten an arrangement whereby HHS signs off on our activities and authorizes them.

They are aware of ours. We are aware of theirs. We coordinate those, but it is not that kind of process in which they sign off.

VOCATIONAL EDUCATION

Senator CHILES. Secretary Brock testified before this committee and expressed concern for the number of our vocational education programs for training of students for jobs for the 1960's rather than the 1990's. Many of my colleagues have expressed that same concern. I have that concern. That is why the new Carl Perkins Act requires that 43 percent of our basic grant, or $324 million, be set aside for program improvement and modernization.

Do you really think that we are going to be able to do that improvement and modernization at the same rate and address those new skill needs if you terminate the Federal funding for modernization?

Mr. CARNES. Well, let me again mention that our decision on the vocational education budget was one that we had to arrive at, operating within a fixed amount of resources. We had to, therefore, make choices among different programs as to which ones we could fund with limited resources.

Having to work within that fixed total compelled us to make these kind of tradeoff decisions. In the case of vocational education, this, as I said yesterday, was not a decision which we were glad to make. We did

not want to make this decision, but when we looked at the relative size of the Federal presence in other program areas that we support and evaluated the size of State, local, other Federal, and private activities in this area, the Federal presence in vocational education is less significant than in those other areas.

Now, as to the innovation and improvement, let me make this point. I agree with you completely that one of the critical things to be done in vocational education if there was funding provided, and I take it that there will be, is to be sure that when we train people for jobs, that we are giving them the kinds of skills that they need not just for their first job, but their second job, and their third job.

Right now, a lot of programs have been successful in placing people, training them for their first jobs, but after they move on to another job or lose that job or that job goes away or whatever happens, they are not prepared to take on a new job and they need new training. We need to ensure that they have the kinds of skills, basic literacy skills, that would enable them to move from one job to another.

So what we would like to see happen in vocational education is to see that the training the kids get in vocational education is complemented by solid grounding in basic skills that will enable them to maximize the training that they do get from vocational education.

Senator WEICKER. Mr. Chairman, would you yield?

Senator CHILES. Yes.

OMB'S BUDGET PLANNING PROCESS

Senator WEICKER. In this response to the chairman, you make the statement "had to work within a fixed total." I do not understand. What are you talking about here?

Mr. CARNES. Again, we had a fixed sum of funds that were available for education.

Senator WEICKER. Who said that?

Mr. CARNES. This was a ceiling provided to us by the Office of Management and Budget.

Senator WEICKER. You mean before you started your process? Before you started your process you were given a total?

Mr. CARNES. Absolutely; every agency is. You are given totals. As a matter of fact, you are given totals for several years down the road.

Senator WEICKER. Before you start your deliberations?

Mr. CARNES. Yes, sir.

Senator WEICKER. Well, that is certainly a new twist around here. I can understand your submitting your budget to OMB and then having OMB come back at you, but in other words it has nothing to do with educational need in this country. The first determination made is a budgetary determination. Is that correct?

Mr. CARNES. This is not a new process.

Senator WEICKER. Never mind whether it is new or not. I just wanted to know. Believe me, it might not be new with this bunch in the White House, but it is a new process.

I am asking you, Mr. Carnes, whether or not you were given the parameters before you even started to prepare your budget.

Mr. CARNES. Every single agency was.

Senator WEICKER. I am not asking about every agency. I am asking about you.

Mr. CARNES. Yes, sir; like everyone else, we were.

Senator WEICKER. That is preposterous. You mean to tell me, regardless of need, regardless of circumstance, the parameters are set?

Mr. CARNES. That has happened in the Carter administration, in the Ford administration, and in this administration.

Senator WEICKER. Are you some sort of historian?

Mr. CARNES. I was in the budget operation for 11 years before this job.

Senator WEICKER. I cannot believe that.

Mr. PUCCIANO. Mr. Chairman, may I respond?

Senator CHILES. Yes.

VOCATIONAL EDUCATION

Mr. PUCCIANO. I just spent the last few days in Hershey, PA, with a group of State vocational education program improvement coordinators. The States are doing many of the things Mr. Carnes talked about that need to be done in terms of modernizing the programs and getting students ready to meet the 21st century.

Program improvement is alive and well in the States. There is no question that the Federal share helps fuel that, but the States have made a major commitment to program improvement activities. Witness the people who were at this conference in the last few days and who are still meeting.

Senator CHILES. I am delighted by that. I think that is great, and I think, in some ways, I understand what you are speaking about; but to me, the fact that we have gone from 70 to 92 percent is all the more an argument why we want to keep that 8 percent. We are getting a heck of a lot for our bucks. We are able to start these States moving in the right direction, and they were not all moving in the right direction before.

Some States are doing exceptional jobs. You had some that literally were in the sixties before, teaching shop and crafts, and they were spending a lot of money for nothing. It just was irrelevant. It had nothing to do with training kids.

So again, for this little seed money that we are putting in, little compared to the program—in fact, it has gone from 70 to 92—that is all the more reason we should keep that 8 percent.

Mr. CARNES. As I said yesterday, it is obviously a desirable thing. We are not challenging that notion. What we are saying is when we look at our budget, we do not see something else that we would reduce by $480 million in order to do that.

Senator CHILES. I say again, as I said yesterday, this is a free country, and you know we are going to restore this money. There is no way that the Congress is not going to put this back.

BUDGET APPEAL

Senator WEICKER. As to that point, Mr. Chairman, if you will yield again, getting back to the point that I made, let us assume that the program targets are made by OMB. Did you people appeal the OMB ceilings?

Mr. CARNES. No, sir.

Senator WEICKER. Of course, I believe both at HHS under Secretary Bowen and at Labor under Secretary Brock, there were appeals. You people did not? You people just took the ceiling and said we will work within it?

Mr. CARNES. Right, sir.

Senator WEICKER. No circumstance could have occurred or prevailed that would have you appeal?

Mr. CARNES. I can imagine circumstances where that might have occurred, but they were not the circumstances this year.

Senator WEICKER. You are the advocate for education?

Mr. CARNES. Yes, sir.

DROPOUT RATE AMONG HISPANICS

Senator CHILES. Ms. Whitten, I am concerned about the recent reports that the dropout rate among Hispanic Americans, our youngest and fastest growing ethnic group, is soaring above the rate for all other groups. Some analysts have said that one reason Hispanics are dropping out is the frustration they experience in trying to learn English.

What are we doing to try to improve that teaching of English?

Ms. WHITTEN. We are increasing our commitment to bilingual education, restoring it to its original intent, which was the acquisition of English as quickly as possible while ensuring that students meet grade promotion requirements, and also coordinating efforts with other programs. This is administratively what we are doing in the Office of Bilingual Education, which is what I assume you are referring to.

We have been working with programs administered by the Office of Elementary and Secondary Education. We have been working with several other programs that also serve the same populations.

Yes; you are correct. There are some cities with Hispanic dropout rates of 70 or 80 percent.

Senator CHILES. What are we doing to try to prevent that?

Ms. WHITTEN. Well, we are trying to ensure that the children stay in school. We are trying to assist schools to give them the type of education that would keep them in school. That includes teaching them in their home language and in many cases includes putting them in classrooms where intensive English instruction is given. In many cases it includes English as a second language, additional classes. It varies in response to local needs.

In fact, I met with the new mayor of Miami 2 days ago. We were talking about this same issue, and he is very concerned about it. He was telling me that Miami now is facing the problem of providing services to 30 different language groups. It is no longer just Hispanics and

Haitians. They have to deal with all of these groups and meet their individual needs. So it varies greatly from school district to school district.

DROPOUT RATE NATIONALLY

Mr. CARNES. The problem of dropouts is a very vexing problem because people drop out for a variety of reasons. Also, a great percentage of them come back in at some point. Estimates range up to 50 percent or thereabouts. Some people do not graduate on time but ultimately do graduate.

In fact, the Census Bureau just reported that there has actually been a recent decline in the dropout rate. They regard this decline as significant. To me, it does not look like a whole lot of improvement, but at least you see a break in the trend.

One of the reasons people drop out is that they are bored to tears in school. Something is wrong in the schools, that they are either not challenging their students, or what is happening in those schools is not keeping those students there.

What we have found when we have examined schools that have had high dropout problems is that they have been in inner city, difficult neighborhoods and we have looked at what has happened in some of these schools. You see Joe Green recently in the newspaper and his school in Detroit, and Joe Clark's school in New Jersey. We have seen that what these people have done is go in there and really take those schools by the scruff of the neck. They talk on the issue of drugs. They talk on the issue of attendance. They are very tough disciplinarians, and what they also do is to establish higher standards and higher expectations for the kids. As a result, what is happening in both these schools is that the dropout rate has actually decreased remarkably. So I am not saying that this is the solution in all cases, but there is evidence that this can work. This is the kind of thing that I think that we see more and more schools adopt. It is the kind of thing that we are proposing and I think Congress is going to enact in terms of accountability and successful practices and results-oriented programs.

IMMIGRANTS AND REFUGEES

Senator CHILES. A report from the Census Bureau shows that with the exception of Cuban immigrants, our recent immigrants from Latin America have arrived with less schooling than those that arrived in earlier years.

These recent immigrants are in greater need of education and training services than their predecessors. Ms. Whitten, since many of these immigrants and refugees have arrived here as a result of Federal policies, why is the administration asking us to terminate all funding for immigrant education, terminate all funding for refugee education, and terminate all funding for bilingual vocational education?

Has the administration taken a comprehensive look at the education and training needs of these immigrant populations?

Ms. WHITTEN. There are several issues. To the extent that these programs are general aid, they do not benefit immigrant children specifically.

Like impact aid, the funds can be used for building schools or many different purposes. And therefore, their accountability is less than a short-term capacity building-type grant such as those we make under the Bilingual Education Act.

To the extent that these children are limited English proficient, they can be helped by chapter 1 and title VII.

Also, as you know, the numbers of refugees have been decreasing. In 1981, 159,000 refugees entered the United States, and in 1987, 66,000 refugees entered.

Many of these schools that receive refugee education funds have been receiving them for 5 or more years now, and they have systems in place such as buildings, physical facilities, or whatever they needed. The educational needs can be taken over by chapter 1 or title VII.

Senator CHILES. Well, given the fact that we're not serving all the needs right now in those programs, how are we going to ask them to take over?

They're not serving the needs out there right now.

TARGETING CHAPTER 1 RESOURCES

Mr. CARNES. The problem with chapter 1 is not a question of serving the needs. It is largely a problem about how the funds are being allocated and how they're being focused on the particular students who need those services.

This is in great part a problem of targeting rather than appropriations. If, for instance, nothing was done in the current formula for this program to improve its focus on poor students, you could appropriate twice as much money as you've now got, but you would still have the same anomalous situation where one kid on this side of the street gets services, and another kid on the other side of the street doesn't.

And they could be—in fact, we have a situation where a kid with higher income and higher achievement scores would get services, and one with lower income and lower achievement services wouldn't.

The thing that has to be done is to focus the services that we've got in areas where there are higher concentrations of poverty and academic need.

Senator CHILES. We still do not, right now, have enough money to focus on all the eligibles?

Mr. CARNES. Currently the program is reaching over 5 million students. The problem with the program is, it is reaching students who are both academically and economically higher than some students it's not reaching.

And that is a question not of money but of targeting. If we were able to improve the targeting—and we are increasing the money, after all—then we could serve a higher proportion of needy kids who are not now receiving services—not through anybody's intention to ignore them, but because of the way the formula works.

IMMIGRANTS

Senator CHILES. Well, school officials of Dade County have told me how many, in effect, new schools they're still having to create per month, or per 3 months, as a result of the immigrants that are coming there now, not as we've said, just Cuban.

They need more education. They are coming from Nicaragua and El Salvador, and the other places which they are fleeing or trying to get away.

And the demand is just as strong on local government as it was in some ways. Now, those numbers may be different across the country. It may be 62,000 as opposed to what it's been; some other number.

But I can tell you where it is striking in our area, no reduction, and the infrastructure is not there. We're having to build new infrastructure all the time.

It costs $3,000 to educate each additional immigrant in the Dade County School District. And what is the average award for the immigrant and refugee programs?

Mr. CARNES. While Carol is thinking about the answer, let me say that $3,000 is about the average, or a little less than the average throughout the Nation, for educating a kid, any kid, anywhere. That's just to put that figure in some kind of context.

Now, if you go back to chapter 1 for a second, we have proposed an increase in chapter 1 that more than makes up for both inflation and the reductions in the immigrant and refugee programs.

Insofar as the principal services required by these children tend to be language services, they are eligible for both chapter 1 and bilingual education services.

Senator CHILES. Again, that's not building any of those new classrooms.

Mr. CARNES. We are not in the school construction business, that is right.

Senator CHILES. Dade County is not in the immigration business, either, but they are the recipient, because of Federal policy, of these people. And that is something basically that we have said is a Federal role and a Federal purpose.

And here you are dismantling it, and the problem is still there.

Ms. WHITTEN. Senator Chiles, the average award is $66 per immigrant child and $193 per refugee child.

Senator CHILES. Well, that's a long ways from what it's costing us. I will yield to Senator Weicker.

CHAPTER 1 VOUCHERS

Senator WEICKER. In your justification, you state that you proposed amendments to the chapter 1 evaluation study program to authorize the Secretary of Education to test alternative mechanisms of providing services to educationally deprived children. Would experimental chapter 1 voucher programs be authorized under this proposal?

Mr. CARNES. We would not preclude them. They would be allowed, but we're not going to urge people to undertake them, nor are we going to prevent them from undertaking them.

Senator WEICKER. Would such tests be conducted only with the agreement of all relevant local and State education agencies?

Mr. CARNES. They would be undertaken with the concurrence and only upon the approval of the local educational agency. The LEA would have the authority to make that decision, and it would be a community decision.

Senator WEICKER. What is the total amount of money the Department has spent in fiscal years 1985, 1986, and 1987 to study or to promote educational choice or voucher systems for distributing chapter 1 funds from all sources in the Department?

Mr. CARNES. I don't think I have that figure off the top of my head. There is certainly none under chapter 1.

Senator WEICKER. How much money have you spent advocating this system which, heretofore, Congress has annually rejected?

Mr. CARNES. The only money we've spent advocating it is our salaries to talk about it.

Senator WEICKER. There is no planning? No planning funds, no personnel set to work on this?

Mr. CARNES. No, sir.

Senator WEICKER. How about chapter 2 discretionary awards? Yes; money is spent. You guys shift around in the field very fast.

Mr. CARNES. I understood you to say chapter 1 evaluation money. chapter 2, I will be happy to——

Senator WEICKER. No; chapter 1, voucher programs. How much money have you spent on this concept of vouchers and educational choice? How much money has been spent in the Department?

Mr. CARNES. Zero.

Senator WEICKER. No money? You mean you just talk about it?

Mr. CARNES. Yes, sir.

Senator WEICKER. Across the board, you just talk about it?

Mr. CARNES. Yes sir; we will find you a list of all the projects.

Senator WEICKER. Content, character, and choice? That's another buzzword here among the fellows.

Mr. CARNES. That was competition that was funded 2 years ago.

Senator WEICKER. What was spent on that, 1985, 1986, and 1987?

Mr. CARNES. I'm sorry, I don't have that figure for you.

Mr. CORWIN. None of the funding for that competition was used to promote chapter 1 vouchers. We can check on that to make sure, however.

Senator WEICKER. Well, you check on it.

ADULT EDUCATION

One of the few bright spots in the budget is the increase you are seeking for the Adult Education State Grant Program. Your request of $128 million reflects a $22 million increase over last year.

Now that's a good program, but it is woefully inadequate by itself to combat the serious nature of the adult illiteracy problem.

Your own Department estimates that between 17 and 21 million adults 20 years of age and over are illiterate. Some experts believe the number to be considerably higher.

Are you aware, and I'm sure you are, Mr. Carnes, that most of the Department's other programs which provide literacy services would be eliminated in the President's fiscal year 1988 budget?

Let me cite some examples. Literary services under the Vocational Education Program, $147 million. Literary services in the Public Libraries Program, down $7 million. Library literacy initiative, down $5 million. And the college work-study literacy project, down $1 million.

So in every case the entire program would be eliminated, and suddenly you have a $22 million increase. That begins to look less and less convincing as an indication of the administration's strong commitment to the fight against adult illiteracy, even in a period of fiscal restraint.

Would you like to comment? And I'm used to this type of a ploy. This is exactly like we're giving additional AIDS money while we cut the basic research money at NIH.

We want to fight illiteracy, so we're adding something over here, in the sense that the Adult Education State Grant Program, while we're cutting all the rest of these programs.

Now would you like to explain it?

Mr. CARNES. Most of the programs you refer to, Senator Weicker, do not provide the kinds of adult basic literacy activities that we're talking about in addressing the needs of adult illiterates.

In fact, almost all of those programs have nothing to do with adult literacy whatsoever.

Consequently, we have focused our available funds on those programs that provide basic adult literacy services through the adult education programs currently in place in the States.

I do not perceive that an increase in 20 percent of those services is at all incompatible with the reduction or even elimination in library services programs, which have an entirely different purpose.

Senator WEICKER. The library literacy initiative, literacy services. I'm not talking just about the Public Library Program.

Mr. CARNES. It is our opinion the best way to provide literacy services is through the State-based Adult Literacy Program.

Senator WEICKER. You think this is a better way to go? If you're wrong, there will have been a considerable cut in literacy services available to the illiterate, right?

Mr. CARNES. I would not agree with that.

Senator WEICKER. You would not?

Mr. CARNES. I would not.

VOCATIONAL EDUCATION

Senator WEICKER. Did the Office of Vocational Education request vocational education moneys from the Department budget office?

Mr. PUCCIANO. Yes, sir; we did. We submitted a budget in July of last year that called for a 20-percent reduction in spending. There was discussion between our offices about that request.

That may have been before the Department received its budget numbers from OMB.

Senator WEICKER. Was your decision budgetary or programmatic?

Mr. PUCCIANO. It was both. We believe that we can meet program requirements and still reduce the budget and help achieve the Gramm-Rudman target.

We were asked to produce a budget at three or four different dollar amounts. As a matter of fact, we produced four different budgets in July of last year.

We recommended one which contained a 20-percent reduction.

Senator WEICKER. Were any of those reductions to zero?

Mr. PUCCIANO. No, sir.

Senator WEICKER. Mr. Chairman, I have further questions for submission to the record. But can I ask one more, Mr. Chairman?

Senator BURDICK. You sure may.

CHAPTER 2 DISCRETIONARY FUND

Senator WEICKER. You received from the same amount of funding, chapter 2, the discretionary account appropriated for fiscal year 1987, but you would eliminate all of the congressionally mandated set-asides, giving you $29.3 million unearmarked funds for your complete discretion.

Your documents indicate, however, that it is the Department's firm intention to fund the mandated programs at approximately the 1987 level. If that's your intention, why do you wish to eliminate the congressionally authorized set-asides?

Mr. CARNES. The problem with the congressionally mandated set-asides is essentially their inflexibility. What it means is that if you have better applications in one area, and even unfundable applications in another, you cannot move funds from the area where you have an insufficiency of applications to meet the needs of those areas where you have good applications.

The consequence of that is that there can be good projects in one area that do not get funded, while projects that would be rated lower by reviewers do get funded because of the rigidity of the set-aside.

Senator WEICKER. We also note that for next year you are not seeking the $3 million appropriation for alcohol and drug abuse regional training centers, because of the existence of the Drug-Free School Act funds which already support the centers.

But you are not seeking to reduce your discretionary by that $3 million.

Mr. CARNES. That's correct.

Senator WEICKER. So what are your plans for the use of the freed up $3 million?

Mr. CARNES. The only free money that was available to the Secretary in 1987 was $1.5 million, which is a substantial reduction over the prior year's level. All the other mandated set-asides consumed $27.5 million out of the $29 million that were available.

Since the drug abuse centers were tripled in funding in the new drug bill, we are using this $3 million for other drug-related activities in fiscal year 1987.

What we would like to do in 1988 is to have more flexibility, and we would add it to the $1.5 million that the Secretary has for his discretion.

Senator WEICKER. Mr. Chairman, thank you very much. Further questions I will submit for the record.

VOCATIONAL EDUCATION RESEARCH

Senator BURDICK. Mr. Secretary, in a statement made by the Department of Education, it has been suggested that the budget incorporates a commitment to better research and statistics related to education.

However, the elimination of research funds included in the Carl Perkins Act severely limits the ability to study what works and what doesn't in vocational programs.

Would you please explain the research commitment to education in light of the entire elimination of research on vocational education?

Mr. PUCCIANO. Senator Burdick, we are at the moment, as you are aware, required by the Perkins Act to undertake an assessment of vocational education. Almost $4 million have been committed, substantial funds, to take a very close look at where we are today with vocational education, and where we should be going into the future.

And I think this assessment will, as I understand the study design, identify those areas which are effective. Further, our office is undertaking right now a program to identify exemplary vocational education programs that address the future needs. We will be presenting these findings to the Secretary as a what works in vocational education and what will work for preparing people for the 21st century.

ALTERNATIVES FOR VOCATIONAL EDUCATION FUNDING

Senator BURDICK. You indicate the Department of Labor spends a substantial amount of money on job training programs. Because of that you suggest spending money on vocational education by the Department of Education is inappropriate.

Yet on-the-job training or education doesn't occur for people who are not employed. Withdrawing Federal funds from vocational education will diminish programs for the 2 million secondary and 1 million postsecondary disadvantaged and handicapped by 25 percent across the country.

In North Dakota, the State budget is in no position to assume more responsibility for vocational education funding.

What viable alternative do you see for addressing the needs of all the disadvantaged who are currently dependent on vocational programs to receive Federal support?

Mr. CARNES. In terms of the overall Education Department budget, I do not see a viable alternative to the elimination of funding for vocational education.

If we were to increase funding for vocational education by $400 or $800 million, we would have to take it from some place else.

In our opinion, programs such as programs for children who need remedial reading and mathematics take priority over that program.

The same is true for programs for the handicapped. We would not cut funds from those programs in order to fund vocational education.

There is no funding, in my opinion, available in the education account to provide services that can be provided through other agencies' programs, or through resources of the States.

And I understand what you are saying about State resources.

Senator BURDICK. There is another alternative, you know; congressional action.

Mr. CARNES. Raise taxes.

VOCATIONAL EDUCATION MATCHING REQUIREMENTS

Mr. PUCCIANO. May I address that as well? We are hearing from States that have some problems addressing the needs of disadvantaged and handicapped under the Perkins Act, and I think it's worthwhile to address that.

One is the matching fund requirement. It appears that the communities that most need that assistance for disadvantaged are the communities least able to afford the match. And, as a consequence, many of the people who ought to be served under the provisions of the Perkins Act may not be, simply because communities cannot come up with the matching funds.

The second problem is with the disadvantaged. What I'm hearing frequently from the States and program improvement people is that the excess cost provisions for helping the handicapped under the Perkins Act may indeed have reduced the number of programs available to the handicapped.

Because with excess cost provisions, States have had to cut out the full programs that they were providing, simply because we weren't providing Federal support for those programs.

So in this case I think, while they were worthwhile provisions under the Perkins Act, they may not, indeed, be doing what we hoped they were going to do, and what the Congress intended for them to do.

VOCATIONAL EDUCATION

Senator BURDICK. All through my congressional career I have always thought that vocational education is a pretty cost effective thing, because of the many students, of course, who cannot follow the orthodox rule of going to college and getting a B.A. degree and all of those things. It would bridge them immediately into a job situation.

So I have been very partial to vocational education. I think the committee will look pretty closely at this.

Mr. PUCCIANO. Vocational education has a major role to play in American public education. It has evolved from what it was in the past, purely job training, to something which can address a number of the problems that American public education is addressing, such as dropouts and the literacy problem.

Vocational education has the ability to help youngsters early on by providing career development information, occupational information, and helping them set occupational and academic goals.

I think the methodology used in vocational education has an opportunity to provide applied academics to a lot of youngsters who have been failed by traditional methods.

So I think that as we look at vocational education spending, and it is clear from both the House and the Senate that the Congress intends to support vocational education, that a close look be given to program improvement and direction and the ability of vocational education to help in a number of other areas.

Senator BURDICK. I have a series of questions on this very subject, but I will ask one more, and this will be submitted to you for reply.

CONSUMER AND HOMEMAKING EDUCATION

The Department of Education recommends terminating funding for the Consumer and Homemaking Education Program. The need to educate disadvantaged youth is critical, with statistics showing close to 40 percent of disadvantaged youths are unemployed.

Consumer and homemaking education addresses the national priority of enhancing employability skills of youth. Other than suggesting elimination of the Consumer and Homemaking Education Program funding, what other preventative mechanisms do you see being used to help stave off these kinds of statistics?

Mr. PUCCIANO. Senator, consumer and homemaking is just one of the areas funded through vocational education spending.

We provide no line item funding for any of the other vocational areas, and it is our sense that the Federal Government ought not to single out a specific area for line item funding.

There is no question but that consumer and homemaking education does an awful lot of things for young people. Parenting training, family programs, traditional values, and home economics education has a very important role to play, particularly at the secondary and middle school levels.

But it is simply our sense that we ought not to be singling out a specific vocational field versus some of the others. There are eight or nine separate occupational clusters included in the enterprise called vocational education.

NORTH DAKOTA

Senator BURDICK. Currently in North Dakota we have many schools that cannot match funds and only have, as vocational programs, consumer and homemaking education. There is no place else to go, that is all they have.

What happens to those people?

Mr. CARNES. Again Mr. Chairman, when we made our decision on vocational education we did not single out North Dakota.

What we have to do is to try to——

Senator BURDICK. But you have us in the net.

Mr. CARNES. I am afraid that is correct. Why do I feel you are going to squirm out of it?

Again, I have said it several times. We try to look at the national effect of the Federal program, the significance of the national presence, and try to see which area overall could bear the loss of Federal funds best.

Senator BURDICK. I understand what you are saying.

Mr. CARNES. I understand why you might not like it.

Mr. PUCCIANO. Sir, all of the program activities that are included under that separate funding for consumer and homemaking education are also included within the basic State grant, so that if consumer and homemaking education did not have the separate line item support, the States could still address all of those consumer and homemaking education programs through their basic State grants.

IMPACT AID

Senator BURDICK. Let us turn to another subject for a minute.

Secretary Bowman, I have one for you, or two.

We both know that impact aid is the block grant type reimbursement which sends money directly to local educational agencies for Federally connected children. Since our Federal laws prohibit the taxation of Federal property and since we allow many tax exempt privileges to our military personnel, we actually prevent the generation of revenue for the operation of our public schools.

Would you explain why the DOE does not assume a stronger advocacy role for the President or the OMB on behalf of the efficacy of the Impact Aid Program?

Where do they put it in this scale of importance?

Ms. BOWMAN. Impact aid?

Senator BURDICK. Yes.

Ms. BOWMAN. We believe that the "a" children under impact aid are a legitimate Federal responsibility and we are proposing that we support that responsibility.

PAYMENTS FOR "b" CHILDREN

Senator BURDICK. What about the "b" children?

Ms. BOWMAN. We believe that the "b" children—these are children whose parents either work or live on Federal property, but not both—are not the same Federal burden to the community as the "a" children whose parents both live and work on Federal property.

Senator BURDICK. Well the "b" children, their parents work, live off the so-called reservation, but work on the base.

Well as you know, North Dakota if it ever seceded would be the third largest nuclear nation in the world. We have two very big bases out there, air bases at Minot and Grand Forks. And this is not to hit those hundreds of our children out there?

I think as many of the families do live off the bases, what do we do about them?

Ms. BOWMAN. If they live off the base then they are contributing to the property tax base for the schools.

PROPERTY TAXES RAISED FROM "b" FAMILIES

Senator BURDICK. They are short-term people. They do not buy houses.

Mr. CARNES. The essence of the program is that it provides payment in lieu of taxes. We certainly believe very strongly that in cases with a Federal presence that results in the loss of taxes, that we have a profound obligation to make up that loss.

Senator BURDICK. What do you mean by taxes?

Mr. CARNES. The property tax that is customarily the base for the support of the public schools.

Senator BURDICK. With 2-, 3-, and 4-year stints, who buys houses?

Mr. CARNES. The residents are paying the property taxes, because those taxes are assessed ultimately on the owner. There is no loss of tax because of the "b" children because the taxes are paid for those kids and consequently there is not the justification for payments for those children that there is for the "a" children.

We are a strong advocate of that and so is OMB. So are other agencies as far as I am aware.

Senator BURDICK. The justification we have is that they do not pay property taxes.

Mr. CARNES. Taxes paid on the property in which they reside.

The tax where they are living is paid. The difference between them and children on the base is the fact that for children living on the base it is not paid.

Senator BURDICK. And, of course, the point has just been made very graphically that the employer does not pay any taxes either, the U.S. of A.

Mr. CARNES. The easy answer to that is that the community suffers a greater loss if the Federal Government were, in fact, to leave.

Obviously any time that were to happen, any time that it is even proposed, both the local residents as well as the representatives in Congress

very strongly object because the Federal presence is, in fact, in almost all cases a bonanza, not a burden.

The proof of it is to see what happens when any of them ever want to go. Again, for "a" children there is clear responsibility but for "b" children, revenues are paid and it is not the Federal responsibility.

Ms. BOWMAN. May I add to that also, when you speak about the employer not paying taxes, there are several sections of impact aid.

When we speak of "a" children and "b" children, we are talking about section 3. But the school district may also be reimbursed under section 2, which takes into account the Federal property and the property tax loss.

Senator BURDICK. Well I wish that you people would attend a meeting of the county commission of Grand Forks sometime. I try to explain this, it is very difficult.

Mr. CARNES. The "b" payments per child are less than one-half of 1 percent of what it costs to educate that child. So those payments are essentially negligible anyway.

Senator BURDICK. Then why not pay it?

Mr. CARNES. Because there are a lot of "b" students, for one thing, and there is no justification for paying it. The second thing is that the accumulation of that one-half of 1 percent throughout the country adds up to real money.

[Discussion off the record.]

PAYMENTS TO THE DISTRICT OF COLUMBIA

Senator BURDICK. Here, we pay $300 million a year to the District of Columbia under this program.

How do you justify that? I will now take care of the biggest air base in the country.

Mr. CORWIN. Impact aid does not pay $300 million to the District of Columbia. That is a payment in lieu of tax arising from the fact that——

Senator BURDICK. Through the D.C. Subcommittee.

Mr. CORWIN. That is right, because so much of the land in the District of Columbia is taken from taxation. That is parallel to what Assistant Secretary Bowman was discussing on section 2. There are various payments in lieu of tax provisions throughout the United States Code. But the actual impact aid payments to the District of Columbia I think are quite small.

Senator BURDICK. Well this little battle will shift to another arena I presume.

QUESTIONS SUBMITTED BY THE SUBCOMMITTEE

In the meantime I will put the balance of my questions in the record at this time.

[The following questions were not asked at the hearing but were submitted to be answered for the record:]

COMPENSATORY EDUCATION FOR THE DISADVANTAGED

Questions Submitted by the Subcommittee

INCENTIVE GRANTS

Question: Why do you propose no funds for the Chapter 1 Incentive Grant program, which would match State appropriations for compensatory education? Wouldn't the Incentive Grant program encourage more States to get involved in special services for the disadvantaged?

Answer: No funds have been requested for the Chapter 1 State Incentive Grant program because the current program structure does not provide a realistic incentive to the States. Funds appropriated for this program are available only to States that already have compensatory education programs similar to Chapter 1 in place at the time of the appropriation. Qualifying States that receive funding under the State Incentive Grant program in the first year are guaranteed the same amount in each succeeding year so long as they maintain their previous year's expenditures for their own compensatory education programs. Thus, no incentives would exist for additional States to begin their own programs unless the appropriation for this program is increased. If the appropriation for the State Incentive Grant were to increase, but no new States became eligible, the States already participating would receive even more funds and the amount guaranteed to them in succeeding years would also increase. This would make it even more difficult for new States to participate in future years unless the appropriation was increased further.

SERVICES TO SECONDARY SCHOOL STUDENTS

Question: Mrs. Bowman, in your budget materials you state that "compensatory education students seem to receive long-term benefit only from continuing program participation." If this is the case, why hasn't the Administration proposed Chapter 1 services for secondary school students as the House reauthorization bill has proposed?

Answer: A separate program for secondary school students was not proposed because school districts can now provide Chapter 1 services for secondary school students. Currently about 23 percent of the students served by Chapter 1 are in the secondary grades. LEAs make the decision on which students to serve based on an assessment of educational needs. Most choose to direct a greater proportion of their Chapter 1 resources to students in the elementary grades because the research indicates that providing compensatory education at an earlier level will have a greater impact. We believe that local school officials should choose how to allocate Chapter 1 resources, as is the case under the current program, rather than create a new program designed specifically for students in the secondary grades.

Question: If program services are extended to secondary school students, what would be the additional cost implications to the program?

Answer: Chapter 1 services are already provided to secondary school students. During the 1984-85 school year (the last year for which accurate data are available), approximately 1,157,000 children in grades 7 - 12 participated in Chapter 1. This represented 23 percent of the total Chapter 1 participants and accounted for approximately $658.8 million of the Chapter 1 LEA Grant appropriation for that year.

It is very difficult to estimate the impact of the cost of such a proposal should it be established as a separate program. The House in H.R. 5 has authorized $100 million for fiscal year 1988 for programs aimed at serving secondary school students. Of this amount, $50 million would support demonstration grants for basic skills improvement at the secondary school level. The remaining $50 million would support grants to demonstrate programs designed to prevent students from dropping out of school.

Question: Do you believe that providing Chapter 1 services to secondary school students would help these students meet the more stringent graduation requirements brought about by the school reform efforts in the States?

Answer: Yes, Chapter 1 services would be beneficial for this purpose. However, Chapter 1 funds could be used only in eligible schools and for children in those schools with the greatest needs as determined by an annual needs assessment. Because of school reform efforts, many State minimum competency programs, funded by State and local sources, have been implemented. Chapter 1 funds could not be used to supplant those services.

BUDGET REQUEST UNDER CURRENT LAW

Question: Mrs. Bowman, you have requested an inflation increase for the Chapter 1 program including a sizeable increase for program evaluation. You have simultaneously requested a number of substantial changes for reauthorization of the program. Since it does not appear that we will have a reauthorized program until 1989, do you still support increases for the program in 1988?

Answer: Yes, we would still support a $200 million increase for the current Chapter 1 program in 1988. The requested increase would enable the Federal Government to continue its commitment to helping States and localities meet the special educational needs of disadvantaged children.

IMPROVING PROGRAM QUALITY

Question: Mrs. Bowman, much has been said about improving the quality of local Chapter 1 programs. What has the Department done to improve local programs?

Answer: The Department has taken several steps to improve programs at the local level. Currently, the Chapter 1 Technical Assistance Centers (TACs) are required to devote approximately 50 percent of their resources to improving Chapter 1 local projects. Assistance from the TACs include:

- o Conducting workshops with State and local officials on using findings from the "effective schools" research that can be applied to their local situations.

- o Consulting with State and local school staff on evaluation issues associated with projects that have been selected for national recognition.

- o Providing technical advice to State and local officials who develop policies that encourage school improvement efforts.

- o Providing direct assistance to a small number of carefully selected projects in each State with poor performace records to enable them to improve program outcomes.

For the past three years, the Department has also identified unusually successful compensatory education programs through its initiative to improve the education of disadvantaged children. The principle attributes of the 116 Chapter 1 programs recognized in 1985 through this initiative, as well as projects selected for validation by the Joint Dissemination Review Panel, comprise the framework of a two-volume source book published by the Department. This source book provides more than 200,000 Chapter 1 teachers and school administrators with information they can use to expand effective programs and practices for educating disadvantaged children. Publication of this sourcebook represents a major effort in our continuing commitment to improving the quality of Chapter 1. This year we plan to publish two more volumes of the source book that will provide short descriptions of the 130 projects recognized as successful in 1986 and the 108 projects recognized in 1987.

In addition, there are 37 successful Chapter 1 programs whose results have been validated by the Joint Dissemination Review Panel and are available for adoption through the National Diffusion Network (NDN). Seven of these are funded by NDN as developer-demonstrator projects and 24 provide limited consultation services on their own.

Question: On the average, how much do you estimate it would cost local school districts to adopt exemplary Chapter 1 program practices?

Answer: We do not have information on the average cost of adopting exemplary program practices selected by the States for national recognition. However, according to NDN, an exemplary project selected as a developer-demonstrator receives an average of $50,000 a year. After the first year, such exemplary projects are expected to achieve at least 50 adoptions.

EVALUATION OF THE MIGRANT AND THE NEGLECTED AND DELINQUENT PROGRAMS

Question: You state that substantial evaluations of the Chapter 1 programs for migrant and neglected and delinquent pupils will be conducted during 1987 and 1988. Why will these evaluations not be completed in time to be used during Congressional consideration of Chapter 1 reauthorizations?

Answer: In order for these studies to have been completed in time for use during the current Congressional consideration of

Chapter 1 reauthorizations, they needed to be started in fiscal years 1983 or 1984. During those years the limited Chapter 1 evaluation funds appropriated by Congress were used primarily to conduct the National Assessment of Chapter 1 mandated under the ECIA Amendments of 1983. Congress is currently making use of information from that study in its consideration of the Chapter 1 reauthorization.

We expect to have preliminary information from the Migrant Education and the Neglected and Delinquent studies available in late 1989. Although this is well after the current Chapter 1 reauthorization cycle, the Congress or the Department might propose changes in the authorizing statutes for these programs at a later date. Information from these studies will be helpful to both the Congress and the Department in formulating legislative and budget policy for these programs in 1990 and beyond.

HIGH SCHOOL EQUIVALENCY AND COLLEGE ASSISTANCE MIGRANT PROGRAMS

Question: Mrs. Bowman, your budget materials ask us to terminate the College Assistance Migrant Program (CAMP) for migrant students and the College Assistance Migrant Program because of the high Federal contribution for each student served. Rather than terminating these programs, has your office ever considered advising the programs on how to become more cost effective?

Answer: Yes, in the grant-making process we try to control high costs by examining all program costs very closely. We pay particular attention to costs not directly related to instruction as well as costs for staffing, equipment, and supplies. Based on this examination, the Department often proposes budget modifications to the grantee's project proposal and negotiates necessary changes with the grantee.

TIME SPENT ON INSTRUCTION

Question: What information do you have on how much time the average Chapter 1 student spends receiving compensatory services each day?

Answer: Preliminary data from the National Assessment of Chapter 1 indicate that instruction in public elementary schools is generally provided five days a week for approximately 35 minutes a day. Chapter 1 instruction in public secondary schools is also generally provided five days per week for about 45 minutes per day.

Question: Do you believe that is enough time to have a significant impact on the student's academic performance?

Answer: Chapter 1 gives local school districts considerable discretion in designing compensatory programs to meet the needs of educationally deprived children. We believe that the amount of time devoted to Chapter 1 services, in most cases, is sufficient to meet the objectives of the Chapter 1 programs that are planned by the local educators. The evaluation results show that the program benefits the children being served.

Question: What effect, if any, would your reauthorization proposals have on the amount of time students spend receiving compensatory services?

Answer: Our Chapter 1 reauthorization proposal does not address the specific issue of how much time a school should spend on providing Chapter 1 instruction. However, our proposal to strengthen program accountability at the local level will help to ensure that the time a school does spend on providing instructional services is of sufficient quality so that the children participating in Chapter 1 will benefit. Our proposal to reward LEAs that operate effective Chapter 1 programs will also encourage schools to work toward ensuring that the time spent on providing instruction is effective.

CHAPTER 1 HANDICAPPED

Question: Your budget for the State agency handicapped program proposes that we transfer funding in Chapter 1 to the Education for the Handicapped State Grant Program. What will be the effects of allocating these funds under the Education for the Handicapped program?

Answer: We believe that allocating funds under the Education of the Handicapped Act (EHA) will help ensure that all handicapped children, including those now counted under the Chapter 1 Handicapped program, receive the services and protections to which they are entitled under EHA. The Chapter 1 Handicapped program predates EHA, and was structured to provide services to institutionalized children who were receiving few if any special education services. EHA was structured specifically to ensure that handicapped children are provided appropriate special education services. A related but separate issue deals with the funding level for children who would have been eligible to be counted under the Chapter 1 Handicapped program. The administration's proposal would gradually reduce funding for these children in the 3 through 20 age range to the same level as other children counted under the EHA Grants to States program. In the case of children birth through 2, it would eliminate funding completely over a 10 year period.

Question: What activities that are currently permissible under the Chapter 1 Handicapped program are not permissible under the Education for the Handicapped program?

Answer: We are not aware of any specific activites currently being conducted that are permissible under the Chapter 1 Handicapped program that are not permissible under the Education for the Handicapped program. However, there is a difference in age range served. The Chapter 1 Handicapped program provides services for children from birth through age 2, whom the Education of the Handicapped Act does not currently cover. The budget request is based on a legislative proposal that would extend Education of the Handicapped Act coverage to include children birth through 2 if they would have been eligible to be served under the current Chapter 1 Handicapped program.

Question: Conversely, what activities are permissible under 94-142 that are not permissible under the Chapter 1 Handicapped program?

Answer: We are not aware of any specific activites currently being conducted that are permissible under Public Law 94-142 that are not permissible under the Chapter 1 Handicapped program. However, there is a difference in age range served. The Chapter 1 Handicapped program provides services for children through age 20, while the Education of the Handicapped Act provides services through age 21.

CHAPTER 1 INCENTIVES FOR SUCCESS

Question: You have proposed that one percent of Chapter 1 grants to local educational agencies in each State be set aside for the State education agency to reward successful programs. On what basis would States determine which are the most successful Chapter 1 programs to receive these funds?

Answer: The State education agencies (SEAs) would select successful programs based on an assessment that uses measurement techniques generally accepted as valid and reliable. These measurements may be based on student achievement tests, performance in the regular school curriculum, or other objective measures developed by SEAs.

EDUCATIONAL EXCELLENCE

Question: It has been argued that the recent national focus on "excellence" in our schools has distracted attention from the needs of the educationally disadvantaged. Does your budget request reflect a renewed commitment to both equity and excellence in our schools?

Answer: I disagree with the notion that the national focus on excellence in our schools has distracted attention or resources from the needs of the educationally disadvantaged. Focusing attention on achieving excellence in education generally and meeting the needs of educationally disadvantaged children are not mutually exclusive goals. Excellence in education cannot be achieved without ensuring that the needs of the disadvantaged are met. Likewise, Chapter 1 programs are unlikely to be successful in schools that operate ineffective instructional programs generally.

Our 1988 budget request for Chapter 1 totals $4.1 billion--a $200 million increase over the 1987 appropriation. This request reflects our continuing commitment to helping States and localities meet the special needs of educationally disadvantaged children and reinforces our commitment to ensuring both equity and excellence in the Nation's schools. In addition, our reauthorization proposal seeks to improve the quality of services provided under Chapter 1 by strengthening its accountability provisions and rewarding success.

1988 REQUEST

Question: How do you respond to the recommendations of many studies that appropriations for Chapter 1 be substantially increased?

Answer: Our 1988 Chapter 1 budget request of $4.1 billion represents a $200 million, or 5 percent, increase over the previous

year's level. This is well above the amount needed to maintain current services and represents a 1.3 percent growth after inflation. Given the fiscal constraints faced by the Federal Government, this is a very substantial increase.

MIGRANT EDUCATION EVALUATION

Question: We understand that the Department is about to begin a new national study of the Chapter 1 Migrant education program. What issues will the study examine?

Answer: The national study will have four components:

1. Synthesis of research and data bases on the Migrant Education program: This component will review and summarize existing research on the Migrant Education program, especially data from the Migrant Student Record Transfer System (MSRTS). The major issues to be addressed in this component include:

   -- How are the needs assessed and students selected?

   -- What are the educational, social, and economic needs of both current and formerly migratory children?

   -- How do services for currently and formerly migratory children differ from those provided by the Chapter 1 LEA Grant program and other Federal or State programs?

   -- What are the program expenditures for instructional and support services versus expenditures for administration?

   -- What are the costs of providing services to currently versus formerly migratory children?

2. Case studies of effective migrant programs: This component will identify practices and specific projects that serve to enhance the education of migrant students. The study will also examine how the best educational practices used in teaching migrant children may differ from those used in teaching other disadvantaged students.

3. National study of the Migrant Education program and its students: This study will be the major examination of the operations of the Migrant Education program and will examine State and local administration, program services and costs, and student characteristics. Various issues will be examined. These include:

   -- Program Administration:

      - How is the program administered at the SEA level? At the LEA level?

      - How are the LEAs selected to participate in the program and on what bases are they funded?

- What proportion of eligible currently and formerly migratory students are served?

- Do the neediest students receive services? How are needs assessed and students selected?

- In terms of assessing needs and providing program services, how does a district distinguish a formerly migratory child (especially one in the fourth or fifth year of program eligibility) from another child who has not moved for four or five years?

- Do some States operate State-level projects rather than funding LEA-based projects? What types of services are provided by the State-level projects? Do the services differ from those provided by LEA-based projects?

-- Program Expenditures:

- What are the program expenditures for instructional and support services versus expenditures for administration? In particular, what are the program expenditures for recruitment?

- What are the costs of providing services to currently versus formerly migratory children?

-- Students Served:

- How needy are the currently and formerly migratory children? How many of the children are limited English proficient?

- How often do the children move, by age and grade? Have there been any changes in the patterns of mobility since the last national study? Is there evidence that the educational or social needs of formerly migrant children decrease the longer they settle out?

- How many children in each year of migrant eligiblity receive services? How do the currently and formerly migratory children differ in educational need from the students who are served by the Chapter 1 LEA Grant program or in a State compensatory education program?

- Do the students served by the migrant education program also receive services under other programs, such as the Chapter 1 LEA Grant program or under Title VII Bilingual Education program? What other program services are received and how many migrant students are served?

-- Program Services:

- What services are provided by the program to children in each year of migrant eligibility? Do services for

currently migratory children differ from services for formerly migratory children? If so, how?

- How do services for currently and formerly migratory children differ from those provided by the Chapter 1 LEA grant program and other Federal or State programs?

- How do services differ for regular versus summer-only programs?

- What is the relationship of the Migrant program to the regular school program?

- What parent or family outreach services are provided?

4. Longitudinal study of migrant students: This study will examine the longitudinal effects of mobility, environment, and program services on changes in student outcome. (Outcomes that would be examined include: attitudes toward school and society, attendance, grades, educational aptitudes, and achievement.)

MIGRANT EDUCATION FORMULA

Question: The justifications state that you will propose changing the allocation formula for the Migrant Education program so that currently migrant children are weighted more heavily than formerly migrant children. Would all formerly migrant children who are now counted for allocation purposes still be counted?

Answer: Yes, under our proposal all formerly migrant children in their first through fifth years of eligibility would continue to be counted for allocation purposes.

MIGRANT COORDINATION ACTIVITIES

Question: In 1895 Congress amended the authorizing language for the Migrant Education program to require that the Department of Education use contracts rather than grants to support migrant coordination activities. How many contracts have you issued since this change? How does this number compare with the number of grants you issued?

Answer: Under the new legislation we have issued one request for proposal (RFP) for three contracts and will issue two more RFPs for one contract each. A total of five contracts will be issued by the end of September 1987. Under the previous legislation authorizing "grants or contracts", approximately 20 grants were issued per year and in September 1986 one contract was awarded.

Question: How do you determine what migrant coordination contracts are needed?

Answer: The topics and objectives for the contracts were determined after extensive consultation with the State Directors of Migrant Education.

HANDICAPPED PROGRAM

Question: What is the status of the national evaluation of the State agency handicapped program, which the Office of Planning, Budget and Evaluation expects to undertake?

Answer: The study was conducted through an award to Research and Evaluation Associates, Inc., and is now completed.

Question: What were this contractor's findings concerning a national evaluation?

Answer: The contractor indicated that it believed that it is feasible to conduct a national study of the impact of the Chapter 1 Handicapped program and the Education of the Handicapped Act. Based on the other results of this study, the Department does not concur in this conclusion. We believe that further analysis is necessary to determine the feasibility of a national study.

Question: According to the report of Research and Evaluation Associates on States with high and low use of State agency handicapped funding, a number of States have funded "non-traditional" programs, which are not directly supporting children in State operated or supported schools or other residential placements. Does the Department believe that States should have such flexibility in the use of these funds?

Answer: The Department believes, in general, that States should have flexibility in using Federal funds to address their needs. However, we do not believe that the Chapter 1 Handicapped program is an effective vehicle for providing this flexibility. Chapter 1 was not designed to deal with "non-traditional" services, hence, there are wide variations in what services have been considered allowable over time and between States. Limiting funding to "traditional" services would concentrate appropriated funds on a smaller number of institutionalized children. This would greatly increase the financial incentive to place children in restrictive institutional environments, and would be counter to the goal of placing children in the least restrictive appropriate environments.

Question: If the uses of funds were more clearly defined, what would you suggest would be appropriate?

Answer: We believe that the most important change in the use of funds would be to eliminate the requirement that children be served through State as opposed to local programs. Within that context, States should be allowed to identify and address their most critical needs. These needs may include such areas as training personnel, providing specialized services, conducting demonstrations, developing models, and disseminating infomation. These activities are already authorized under the State education agency set-aside of the Education for the Handicapped Grants to States program.

Questions Submitted by Senator Lowell P. Weicker, Jr.

PROMOTING VOUCHERS

Question: I'd like to follow up on a matter that came up at this morning's hearing. My question to you was, how much is the Department spending from all areas, in the past three years, to promote the voucher proposal? You indicated that the Department has spent nothing in this area.

But we know that in 1985, the Department ran a competition and the first activity listed for proposals was "vouchers to parents for alternative educational services for their children."

Subsequent press accounts indicated that 15 of the 34 awards were made in the area of "Choice" to vocal supporters of Mr. Bennett's plan to convert Chapter 1 remedial education aid into a voucher program.

We also know from your documents that in FY 88, OERI is planning major conferences on character development and "Choice." We know that the Department has developed its choice proposal (costing staff time and funding), and that the Secretary has made a number of speeches promoting this issue.

There may be other grants and consultant contracts of which we are unaware.

Let me ask again, Mr. Carnes, how much has the Department spent over the past three years, and is planning to spend in FY 88, from all sources, to promote a voucher-type system which Congress has consistently rejected?

Answer: Your questions during the morning session were part of a discussion of the Department's proposals for the reauthorization of Chapter 1, particularly its evaluation authority. Let me repeat the answer I gave then -- the Department has spent no funds to promote vouchers. In the past year, the Department has spent no funds, other than for the staff time necessary to prepare the Chapter 1 reauthorization proposals, to "promote a voucher-type system" for Chapter 1, or given any funds for anyone to study the issue. The preparation of legislative proposals is, of course, a normal and necessary function of the Department.

Under the Chapter 2 Secretary's Discretionary Fund, 15 awards in the area of educational choice, amounting to $1,029,000, were made as a result of the 1985 competition. Of these, three are studies directly concerned with vouchers. Two are studying existing State voucher systems (one in Louisiana and one in Minnesota) and the third is surveying implementation problems of a number of choice systems currently in use, including vouchers. The total cost for these three awards is about $225,000. All of these projects are entirely consistent with the authorizing statute for the Secretary's Discretionary Fund. No projects on educational choice were funded from the Secretary's Discretionary Fund from 1986 or 1987 funds.

There are several other activities in fiscal year 1987, either planned or completed, that address issues related to choice in education. The purpose of these activities is to gather informa-

tion about extant practices and to make that information available to practitioners, policy makers, and parents. These activities were not designed with the purpose of promoting any specific "choice" practice.

A meeting recently convened by the Office of Educational Research and Improvement (OERI) and the Office of Elementary and Secondary Education (OESE) on magnet schools addressed issues of choice for parents, since that is the underlying rationale for the magnet schools concept. That meeting cost about $26,000. OERI is planning a conference on how parents make choices and on the effects of policies that permit greater choice on students, families, and schools themselves. This meeting, including the cost of preparing papers for it, is estimated to cost about $30,000. OERI is also developing a guide to help parents participate more fully in programs like magnet schools that allow parental choices. The guide will cost about $10,000. These two conferences and the parent guide will be paid for with fiscal year 1987 funds. All these small projects are focused on manifestations of choice within public education. At present, we have no specific plans for fiscal year 1988 related to either choice or vouchers.

Nonetheless, it is important that the Department be able to participate in the discussion of ideas in this area and to pursue relevant knowledge. Governors, as outlined in the recent report of the National Governors' Association, A Time for Results, are interested in choice plans and in permitting families to choose from among public schools. Members of the Congress are also interested. It is entirely appropriate for the Department of Education to support projects that contribute to this important discussion.

NEGLECTED AND DELINQUENT PROGRAM

Question: A recent Department of Education-funded report on the Chapter 1 State agency program for the neglected and delinquent found that the program suffers from poor quality of information on who is served and the effects of those services. Would you comment on what the Department has done to address the problems you found in this program?

Answer: The recent study examined data from the first reports that States were required to submit for the Chapter 1 Neglected and Delinquent program. Since that time, the Department has clarified the reporting requirements and provided guidance for completing the report. More complete and accurate data on participants are now available.

Many of the neglected and delinquent children do not stay in the State schools very long. Because of their short stay, it is difficult to measure the effectiveness of the Neglected and Delinquent program. The Technical Assistance Centers have provided assistance to States in this area. In addition, this concern will be addressed in the national assessment of this program that the Department will begin in 1987. Other areas that will also be examined in the national assessment will include: (1) a description of services provided; (2) information on the population served; (3) administration of the program; and (4) attributes of effective programs.

Question: Are the institutions that participate in the Chapter 1 neglected and delinquent program primarily concerned with educational or custodial services? If the latter, how can you influence these institutions to give higher priority to education?

Answer: The primary purpose of State institutions for the neglected or delinquent is to provide custodial care. In some cases these institutions also provide rehabilitation services. Education services, although provided at all these institutions, are not their primary concern. Chapter 1 is designed to supplement the education programs provided by State institutions because almost all the inmates are educationally disadvantaged and are unlikely to receive special educational services from other sources. We believe that the availability of the Chapter 1 Neglected and Delinquent program encourages these institutions to give a higher priority to education.

1988 BUDGET REQUEST

Question: You have requested an increase of $200 million--5 percent--in funding for the Chapter 1 programs of education for disadvantaged children. Does the proposed increase represent: simply keeping up with inflation, an attempt to increase the level of participation by educationally disadvantaged children in this program, or an attempt to provide funding for new types of Chapter 1 activities included in your reauthorization proposals?

Answer: Our 1988 request represents several of the elements mentioned in this question. The proposed $200 million increase provides for a 1.3 percent funding growth for the program after inflation.

About $183 million of the requested increase would provide more resources for States and localities to serve additional students or spend more on each student currently being served. The decision on how to allocate Chapter 1 resources is made at the local level.

The proposed increase would also help support program reforms that we have developed in our legislative proposal. For example $3 million of our increase would be made available for State administration to help them meet the strengthened program assessment requirements of our reauthorization proposal.

Approximately $13.7 million of the increase would support an expanded demonstrations, evaluation, and technical assistance authority. The activities planned under this authority would build on Chapter 1 evaluation and technical assistance activities that currently take place. Additional activities would be designed to improve our knowledge about what works, and for whom, and to disseminate information about successful practices.

Question: In your justifications, you state that about 40 percent of children scoring below the 25th percentile on standardized achievement tests, and enrolled in Chapter 1 schools, are served by this program. Wouldn't this suggest that funding should be increased significantly, perhaps even doubled, in order to attempt to serve all such eligible children?

Answer: Not necessarily. This finding points more to the need to improve targeting of available Chapter 1 resources on school districts, schools, and children most in need of assistance, so that available funds will have the greatest impact. Chapter 1 funds are currently allocated to some 90 percent of all LEAs in the United States. The National Assessment of Chapter 1 found that this diffusion of resources has resulted in the program not serving a significant number of needy children. For example, school districts with large concentrations of poor children receive sufficient funds to serve only a portion of their low-achieving students and thus a significant number of needy students in these districts remain unserved. In wealthier districts many higher-achieving students who do not have as great a need receive Chapter 1 services.

CHAPTER 1 DEMONSTRATIONS, EVALUATION, AND TECHNICAL ASSISTANCE

Question: In your justifications, you state that your proposed amendments to the Chapter 1 evaluation and studies program would authorize the Secretary of Education to "test...alternative mechanisms for providing services to educationally deprived children." Would experimental Chapter 1 voucher programs be authorized under this proposal?

Answer: Yes, under our proposal, which authorizes a limited compensatory education certificate program initiated at the option of the State or local education agency, a school district or State educational agency could apply for funds under this authority to demonstrate a compensatory education voucher program.

Question: Would such tests be conducted only with the agreement of all relevant State and local educational agencies?

Answer: Under our proposed demonstration authority State and local educational agencies would be the primary competitors for demonstration grants. Therefore, any demonstration projects funded under this authority would have their approval.

SPECIAL PROGRAMS

Questions Submitted by the Subcommittee

CHAPTER 2 -- STATE AND LOCAL USE OF FUNDS

Question: Mr. Carnes, many questions have been raised as to how the State education agencies are using the $100 million they receive as part of the Chapter 2 Block Grant. What can you tell us about how these funds are being used?

Answer: The Department has contracted for five case studies to be conducted in SEAs this spring to examine the uses of Chapter 2 funds in detail. The case study findings will be used to describe State efforts for educational improvement and to generate definitions of activity categories funded by Chapter 2. The contractor's report is due in June 1987, at which time a copy will be sent to the Committee.

Question: Some counties have also argued that certain localities are using Chapter 2 funds as general operating revenue rather than for reform and enhancement efforts. Do you believe this is a problem out in our local educational agencies?

Answer: No. Neither the recent national study of the implementation of Chapter 2 at the local level nor monitoring of the Chapter 2 program by the Department, have found this to be a problem.

CHAPTER 2 -- FEDERAL DOLLARS SUPPLANTING STATE DOLLARS

Question: Mr. Carnes, why do you propose in your new Chapter 2 Block Grant program that we waive the "supplement not supplant" requirement? Won't this result in Federal dollars simply replacing State expenditures for certain purposes?

Answer: We are proposing a limited waiver of the "supplement not supplant" provision because it prevents the use of Chapter 2 funds to meet State-mandated education standards. Thus the provision has limited the utility of Chapter 2 as a vehicle for promoting educational reform, and enactment of the waiver authority would make it easier for States to use the block grant to foster excellence in their schools. A State would be eligible to apply for a waiver if the State enacted legislation requiring an innovative program to improve local educational practices in elementary and secondary schools. A waiver could be granted with regard to an activity that was required by State legislation to be implemented on or after the enactment of our proposal. The Secretary would be authorized to grant a waiver for no more than two fiscal years; after expiration of the period for which the waiver had been granted, the nonsupplanting requirement would apply to these State-mandated activities. A State educational agency or local educational agency would remain subject to the nonsupplanting requirement for any State-mandated activities not contained in the legislation for which the waiver was granted. Further, a State or local educational agency would be authorized to use the waiver at its option; it would not be required to use Chapter 2 funds for activities covered by the waiver.

CHAPTER 2 -- PARENTAL INVOLVEMENT

Question: Given the importance the Administration has attached to parental involvement through its Chapter 1 proposal and its study of the Japanese education system, what corrective action does the Department plan to take regarding the low level of parental participation found in the Chapter 2 program by the SRI study?

Answer: Local school officials must make a concerted effort to reach out and involve parents in the education of their children. This is particularly critical in the education of disadvantaged children. It is not enough for local school officials just to provide forums such as parent-teacher association meetings as a way to involve parents. They must work actively to bring parents together with the school. This could consist of developing special outreach programs for parents or creating adult literacy programs for parents of educationally disadvantaged children.

In our Chapter 1 reauthorization proposal, we have encouraged increased parental participation by providing more specific guidance to school districts with regard to requirements for written policies on parental involvement, the annual meeting of Chapter 1 parents, and additional activities that may be funded at the request of parents. Our bill also authorizes national demonstration projects that would give the Department a way of testing approaches for increasing parental involvement in the program.

The study of Chapter 2 by SRI International found that, although school districts attempt to directly involve parents and citizens in the Chapter 2 decisionmaking process, the participation levels are low. Districts tend to rely on school board meetings, existing advisory groups, or PTA meetings to satisfy the requirement that parents be systematically consulted about the use of Chapter 2 funds. Local Chapter 2 coordinators attribute the low level of participation of parents and other community members in Chapter 2 decisionmaking to: the small amount of funds, the continuity existing between Chapter 2 and the antecedent programs, and satisfaction with current programs. In monitoring the block grant, the Department will continue to address the parental participation requirement to be certain that it is met and that SEAs and LEAs encourage active involvement of parents in the program.

CHAPTER 2 -- INFORMATION ON USES OF FUNDS

Question: What information does the Department collect on a regular basis as to how Chapter 2 funds are being used at the State and local level?

Answer: The Department collects information pertaining to the nature, quality and effectiveness of programs and activities administered under Chapter 2. This information is obtained from the following sources:

- o Annual evaluation reports
- o On-site monitoring visits
- o Annual conferences
- o State applications

CUTS IN CHAPTER 2 SERVICES

Question: Mr. Carnes, your budget materials state that funding for the Chapter 2 State Block Grant continues to be a high priority for the Administration. But, throughout your budget, you terminate numerous smaller programs and argue that these services can be funded out of Chapter 2. When you add up all the terminations that you say can be funded under Chapter 2, they add up to more than $128 million. If we enacted your budget and walked away from these programs, and made the States pick up the tab with their Chapter 2 funds, wouldn't we, in effect, be cutting current Chapter 2 activities by 25 percent?

NOTE: Programs that budget justification claims can instead be funded under Chapter 2:

- o $2.2 million - Territorial Teacher Training
- o $7.2 million - Leadership in Educational Administration
- o $3.5 million - Women's Educational Equity
- o $24.0 million - Training and Advisory Services
- o $5.0 million - General Assistance to the Virgin Islands
- o $1.7 million - Ellender Fellowships
- o $7.2 million - Follow Through
- o $30.0 million - Immigrant Education*
- o $15.9 million - Refugee Education*
- o $31.6 million - Consumer and Homemaker Education

$128.1 million TOTAL

* Budget claims that these services can also be provided through Chapter 1 and Bilingual Education but neither of these programs currently serve all eligible students.

Answer: No. The Department's budget justification does not state that funding for all of these programs should be subsumed entirely by Chapter 2. More specifically, the Department proposes to eliminate these smaller categorical programs because they either duplicate other departmental programs or have outlived their usefulness.

For example, the Territorial Teacher Training and Leadership in Educational Administration programs duplicate the proposed Christa McAuliffe Teacher Training and Improvement Act. Ellender Fellowships can be paid for with funds raised by the program's sponsoring organization, the Close-Up Foundation, or with local funds. Follow Through no longer needs to be supported as a categorical program because the objectives of the program have been met. The Women's Educational Equity program has outlived its usefulness, has failed to demonstrate its effectiveness in recent years, and often duplicates the activities of other programs. State and local educational agencies may, if they wish, use their Chapter 2 funds to supplement activities formerly supported by these programs, but would not be required to carry on these categorical activities.

DRUG-FREE SCHOOLS - TECHNICAL AMENDMENTS

Question: Mr. Carnes, the Department has sent up a package of technical amendments to the Drug-Free Schools Act. Will Congressional action on these proposals interrupt in any way your timetable for obligating the funds already appropriated?

Answer: No. The Department will continue to obligate the appropriated funds in the most timely manner possible.

DRUG ABUSE - JOINT STUDY WITH HEALTH AND HUMAN SERVICES

Question: Mr. Carnes, the Drug-Free Schools Act mandates that the Department conduct a study with the Department of Health and Human Services regarding ongoing drug education and prevention programs. What is the status of this study and when do you intend to report its findings to the Congress?

Answer: The study is proceeding on schedule, with the full cooperation of the Department of Health and Human Services. Of the several components of the study, the Federal survey is underway, the State and local survey instruments will be distributed shortly, and the literature review is in the planning stages. We expect to deliver the report to the President and the Congress in the fall of 1987. The study will report on the efforts of State and local educational agencies, those of other State agencies concerned with drug and alcohol abuse, and on the available research on the effectiveness of various approaches to drug abuse prevention. It will also report on Federal prevention and education efforts aimed at eliminating substance abuse among the school-age population.

Question: Mr. Carnes, the Drug-Free School Act requires the Department of Education to coordinate its efforts with the Department of Health and Human Services (HHS) for the administration of $6.8 million of Federal activities. I understand that the two Departments have reached interagency agreements for the Clearinghouse activities and the study mandated in the law. Why hasn't an interagency agreement been developed for the $6.3 million in discretionary activities?

Answer: Unlike the Clearinghouse, which is operated by HHS with funds appropriated to the Department of Education, and the mandated study, which by statute is to be conducted in conjunction with the Secretary of HHS, the balance of the funds for Federal Activities are appropriated to the Department of Education. Consequently, no interagency agreement is necessary to conduct these activities. Nonetheless, we meet with HHS regularly about the Federal Activities program and other drug education-related topics, and they are aware of and influence our plans. For example, we have requested that HHS provide the names of individuals that could serve as reviewers for the Federal Activities Grants program applications.

Question: What are your plans for these funds?

Answer: About $5 million of the funds appropriated for Federal Activities will be awarded as grants to implement or develop comprehensive programs that deliver services to elementary and secondary school students. We anticipate that a number of these will be

newly developed. Other programs, however, will be based on existing programs which exhibit the characteristics, described in Schools Without Drugs, that we consider necessary for such programs to be effective. The balance of the funds will be used for activities such as the Drug-Free Schools Recognition program, which will recognize elementary and secondary schools that successfully combat drug and alcohol abuse, and the Network of Drug-Free Colleges, which will link colleges that are fighting drug abuse on campus thereby enabling them to share their experience and successes.

Question: What is your timetable for obligating them?

Answer: A Notice of Proposed Rule Making (NPRM) and an Application Notice were published in the Federal Register on April 23, 1987. The deadline for applications for the Federal Activities program is June 24, 1987. We expect to make awards in time for the 1987-88 school year. We will begin the process of selecting schools for recognition under the Drug-Free Schools Recognition program in the fall of 1987. The Network of Drug-Free Colleges will also have its first large scale meeting in the fall.

Question: Mr. Carnes, the Department's publication Schools Without Drugs has been on the street now for some time. You have informed us that it may set a new record for the distribution of a Federal publication. Has the Department translated this book into Spanish or any other of our immigrant languages?

Answer: We have not translated Schools Without Drugs into any other languages. It has been privately translated into Chinese, but not into Spanish, as far as we know. The United States Information Agency plans to translate it into Spanish this summer for overseas uses, and the Department may print copies of that translation for use in this country, if demand warrants it.

Question: A large piece of the Drug Free School's money for National programs will be used for the development and distribution of curriculum materials. Do you plan to provide any funds for Spanish language materials?

Answer: At present we have no specific plan to request applicants to develop materials in languages other than English. Applicants for grants under the Federal Activities authority are free to propose such materials, and since our emphasis is comprehensive drug education and prevention programs developed in cooperation with parents and the community, we may well receive such applications.

Question: Given the desperate drug problem we face in some of our immigrant populations, don't you think we need to target some of our resources to those areas?

Answer: Areas which have large numbers of non-English-speaking immigrants may indeed also be areas where there are severe problems with drugs, although we believe that the problem is common in nearly all communities, large and small, newly immigrant or not. We believe it would be premature to target funds to particular kinds of communities or populations until we have an opportunity to review the needs identified by State and local institutions.

TEACHER TRAINING AND IMPROVEMENT

Question: Your FY 1988 budget justifications (p. 51) indicate that no FY 1988 funds are requested for the math/science program because the current program has too many set-asides and requirements. What information do you have that justifies the broadening of the current Title II of the Education for Economic Security Act to cover all academic areas? Have the major problems related to the relatively low achievement of American students in math/science and the shortage of qualified teachers in these areas been addressed, or are the problems just as severe in the other areas?

Answer: There is considerable debate as to whether there is an impending teacher shortage. According to Emily Feistritzer's report, Teacher Crisis: Myth or Reality?, A State-by-State Analysis 1986, most of the arguments used to build a case that there is a crisis in teaching are based on projections and speculation. Raw data indicate that the hiring of new teachers has kept pace with school enrollments and, in some areas, the supply of teachers actually exceeds demand. In addition, the subjects in which shortages were reported include not only mathematics and science, but also special education, English language arts, bilingual education, and industrial arts.

The Christa McAuliffe Teacher Training and Improvement Act, proposed as an amendment to Title II of the Education for Economic Security Act, would broaden the authority of that Act to improve teaching in all academic disciplines. In addition, the new program would address problems related to the relatively low achievement of American students in mathematics and science. We believe that a program of broad Federal support for teacher improvement is preferable to narrow categorical programs that may not match the teacher training needs of individual States and communities.

Question: Do you see any improvement in the standing of American students in the international tests for proficiency in math and science?

Answer: Three recent studies released by the National Research Council (NRC) indicate that the mathematical ability of American students ranks "among the lowest of any industrialized country." American students' low performance is attributed to a variety of cultural and academic causes including repititious secondary mathematics curriculums, Americans placing less importance on mathematics, placement of students in classes by ability, and American students and parents having different attitudes from their counterparts in other countries about what produces success in mathematics.

NRC concludes that there was no mathematical ability improvement in the relative status of American students and that achievement differences could be attributed to differences in attitudes toward education.

Question: What further activities would be permissible under the proposed "teacher training and improvement" program in the FY 1988 budget proposal that could not be carried out under the programs for improvement of math/science programs under Title II of the Education for Economic Security Act or under the State

education block grants under Chapter 2 of the Education Consolidation and Improvement Act?

Answer: Activities proposed under the Christa McAuliffe Teacher Training and Improvement program could be carried out under the existing Science and Mathematics Education program or Chapter 2 of the Education Consolidation and Improvement Act. However, we believe there is a need for a program that would direct comprehensive Federal support to teacher training and improvement in a broad array of subject areas, rather than the narrow focus of the existing program.

Question: In what ways will this proposed program for teacher training and improvement be a more effective use of limited Federal funds than the current math/science program under Title II of the Education for Economic Security Act, the leadership in educational administration development (LEAD) program authorized under Title IX of P.L. 96-558, and the provisions for territorial teacher training under section 1525 of P.L. 95-561?

Answer: We believe that at the proposed funding level, the new Christa McAuliffe Teacher Training and Improvement program will have a greater impact on teacher training, and be a more effective use of Federal funds than the current programs by making teacher training available in all subject areas and by being more responsive to the needs of individual States.

The enactment of the more comprehensive and flexible Christa McAuliffe Teacher Training and Improvement program would make the current Science and Mathematics Education, LEAD, and Territorial Teacher Training programs redundant and unnecessary. While we fully support the objectives of the current Science and Mathematics Education program, we believe it can be improved considerably by broadening its authority to serve teachers in all academic disciplines and by removing the burdensome administrative requirements (i.e., formula allocation and need analysis requirements, requirement for LEAs to obtain a waiver in order to use funds for other than science and mathematics inservice training) and funding set-asides that hamper current program operations. In the case of the LEAD program, we believe that able school administrators are vital to the improvement of education; therefore, training of administrators is one of the major objectives of the proposed Christa McAuliffe Teacher Training and Improvement Act. Similarly, the Outlying Areas will be eligible for funds under the proposed Christa McAuliffe Teacher Training and Improvement Act and will continue to receive Chapter 2 funds, making the Territorial Teacher Training program unnecessary.

TERMINATION OF MATH/SCIENCE - DEMAND FOR TEACHERS

Question: Mr. Carnes, the National Science Board reports that by 1995, we will need twice as many teachers in math and science as we have today. For every math and science teacher entering the field today, 13 are leaving the field for other professions. Math, science, computer training, and foreign languages are the most critical disciplines to our national competitiveness. Why, then are you proposing to terminate the Math/Science program in favor of a teacher training program for all disciplines? Do you believe that training social

studies and humanities teachers is as critical at this time as training math and science teachers?

Answer: There are several studies which conclude that teacher shortages are unlikely. According to Emily Feistritzer's report, Teacher Crisis: Myth or Reality?, A State-by-State Analysis, most of the arguments used to build a case that there is a crisis in teaching are based on projections and speculation. Raw data indicate that the hiring of new teachers has kept pace with school enrollments and, in some areas, the supply of teachers has actually exceeded demand. In addition, the Bureau of Labor Statistics (BLS) reports that reform measures, such as higher pay and higher status for teachers, in combination with normal market adjustments, should not only prevent shortages from materializing, but may even enable schools to be more selective in hiring. BLS concludes that, on the whole, no large-scale teacher shortages are likely. Finally, using data provided by the Bureau of Labor Statistics, the Center for Education Statistics (CES) reports that the rate at which teachers leave their jobs is consistent with the rates at which other professional and technical workers leave theirs. The Center indicates that elementary and secondary teachers are not leaving teaching at a high rate when compared to persons in other professional occupations requiring similar preparation for entry level-positions. CES also concludes that transfers into teaching are no greater than transfers-out, for both elementary and secondary teachers.

The proposed Christa McAuliffe Teacher Training and Improvement program would provide comprehensive Federal support for teacher training in a broad array of subject areas including math, science, computer training, foreign languages, social studies, and humanities. The new program would more effectively address the specific elementary/secondary teacher training needs of individual States and communities than the current Mathematics and Science Education program.

TERRITORIAL TEACHER TRAINING

Question: Concerning the recommendation that funding for Territorial Teacher Training (section 1525 of P.L. 95-561) be terminated, do you have information that justifies a reduced level of need for teacher training and improvement in the outlying territories?

Answer: There is some information to that effect. The fiscal year 1986 Territorial Teacher Training program continuation proposals from the Territories indicate, for example, that almost all teachers in Guam had full certification as of the 1986-87 school year. Additionally, under the Compact of Free Association, the Freely Associated States of the Federated States of Micronesia and the Marshall Islands, formerly part of the Trust Territory of the Pacific Islands, will be phased out of Department of Education funding.

Question: Isn't it true that for FY 1987, $2.0 million would have been available for Territorial Teacher Training while under the proposal, the Department indicates that 0.5 percent of the

program's funds, or only $320,000 would be available for the Territories?

Answer: Under the Department's 1987 revised request, 0.5 percent of the $80 million requested for Science and Mathematics Education, or $400,000, would be reserved for the Outlying Areas. These funds, in addition to the $5.3 million available to the Outlying Areas from the Chapter 2 State Block Grant program and more than $26 million in additional Department of Education funds under the consolidated grant authority, can support teacher training activities in the Outlying Areas in 1987. Under the Department's 1988 request, 0.5 percent of the $64 million requested for Christa McAuliffe State grants, or $320,000, would be reserved for the Outlying Areas. These funds, in addition to the $5.3 million available to the Outlying Areas from the Chapter 2 State Block Grant program and more than $22 million in additional Department of Education funds under the consolidated grant authority, can be used to support teacher training activities in the Outlying Areas.

Question: Your FY 1988 budget justifications indicate that the average teacher in some of the outlying areas does not have sufficient credit hours to receive a bachelor's degree. Do you consider such teachers to be adequately prepared?

Answer: No. However, the Department does not propose to eliminate Federal funding for teacher training in the Outlying Areas. Funds available to the Outlying Areas from the Chapter 2 State Block Grant program, Christa McAuliffe Teacher Training and Improvement State Grant program, and other Department of Education programs under the consolidated grant authority can be used to support teacher training activities in the Outlying Areas.

EXCELLENCE IN EDUCATION

Question: The Department of Education is requesting that the Congress rescind unobligated FY 1985 and FY 1986 appropriated funds for the Excellence in Education Act. The Congress did not act on a rescission request for this Act last year. Why should it do so this year?

Answer: The reasons for requesting a rescission have changed. We argued then that the operation of the program was cumbersome and burdensome to State and local authorities, and that the Department's School Recognition program and Chapter 2 of the Education Consolidation and Improvement Act were better vehicles for promoting educational reform. While these arguments are still true, we believe that our experience in the past year, in which too few applications of sufficient quality were received for us to obligate all of the fiscal year 1985 funds available for Special School awards, provided additional and persuasive evidence for a further request for a rescission. Furthermore, as we requested, Congress provided no funds for the program in fiscal year 1987, primarily for these same reasons.

Question: If the Congress does not approve your rescission request for the unobligated FY 1985 and FY 1986 appropriated funds for the Excellence in Education Act, when can we expect to see these funds awarded to local school systems? When will the

remaining FY 1985 funds be awarded? Why has it taken the Department of Education so long to make awards under this program?

Answer: At present the Department has no plans to make additional new awards under the Excellence program. We do plan, however, to make second-year continuation awards for the projects first funded from the fiscal year 1985 appropriation. Virtually all the remaining unobligated balances must be used for Special School Grants and for evaluations. Last year's competition for Special School Grants did not demonstrate a demand for these funds --for which reason Congress provided no 1987 appropriation. Therefore, the Department will determine the use of these balances, which remain available until expended, after completion of projects in progress and any follow-up evaluation.

Question: The Department of Education's justification for its proposed rescission of the unobligated FY 1985 and FY 1986 balance for the Excellence in Education Act fails to reflect the statutory changes made to the program by the Human Services Reauthorization Act of 1986 (P.L. 99-425). These changes were intended to address an allocation problem in the program to facilitate awarding of funds. Do these changes affect your spending of FY 1985 and FY 1986 unobligated amounts?

Answer: The changes in P.L. 99-425 apply only to funds appropriated subsequent to the enactment of the public law. No funds were appropriated in fiscal year 1987, the first year after the changes were enacted. Funds appropriated prior to enactment of P.L. 99-425 remain available under their original authorization. Consequently, the unobligated balances from both fiscal years 1985 and 1986 can only be expended for Special School awards and for research, evaluation, dissemination, and monitoring.

Question: What is the impact on the Nation's school reform movement of the funds appropriated for the Excellence in Education Act in FY 1985 and FY 1986? Is there any value in the Federal Government supporting small, school-based reform projects?

Answer: The 121 awards made to date under the Excellence in Education program have had little effect on the educational reform movement nationally, because they effect relatively few schools and are small projects whose activities are primarily confined to single school buildings. We believe that projects on this scale and educational level are an excellent way to proceed with educational reform but not when the awards must be made as the result of a burdensome two-tier review process, and when the final funding decisions are made by the Federal Government. Decisions about the support of such projects are more appropriately made by State and local officials.

TRAINING AND ADVISORY SERVICES

Question: Why does the recent finding that currently funded Training and Advisory Services activities are addressing "second generation" school desegregation issues, such as segregation within schools through tracking, justify terminating funding for these activities? Why do you conclude that the original purpose of the Training and Advisory Services activities was to address

"first generation" desegregation issues, that is, the physical movement of students from one school building to another?

Answer: Twenty years ago, the major issues to be addressed by Training and Advisory Services were problems related to the physical desegregation of public schools. After over 20 years and over $500 million in appropriations, the emphasis of the program has shifted to more subtle "second generation" school desegregation problems that may not be suitable for resolution through a Federal categorical program. Additional desegregation and equity problems can be addressed with such resources as Chapter 2 State Block Grants and Magnet Schools Assistance grants.

Question: How many school systems and how many students are served by the desegregation assistance centers funded under the Training and Advisory Services authority? How many systems and students would be served under your proposed reduction of the number of centers supported by FY 1987 funds from 40 to 10?

Answer: The Department has not required desegregation assistance centers to provide information on the numbers of school districts and students served. Many school districts receive assistance through dissemination activities, regional conferences, and other means designed to share information with wider audiences. Others receive assistance through inservice training activities designed to develop or improve specific skills of identified staff, and still others may receive technical assistance and advice in solving a wide range of problems. Since technical assistance is provided to school districts only upon their request, we are unable to offer specific estimates as to the number of school districts that will be served with fiscal year 1987 funds. However, reducing the number of desegregation assistance center grants should not result in fewer LEAs or students served by desegregation assistance centers because each center will be capable of providing comprehensive assistance in a geographical service area.

Question: Why will the share of the Training and Advisory Services appropriation supporting desegregation assistance centers be reduced from 42 percent in FY 1986 to 34 percent in FY 1987?

Answer: Given the proposed changes in the Training and Advisory Services program, we believe that the reduced funding level for desegregation assistance centers will be a more efficient use of funds and that it will be offset by the cost savings resulting from improved project administration. One desegregation assistance center in a geographical service area will provide comprehensive assistance to school districts, and have the flexibility to use its funds to respond to the particular needs of their service area. In addition, the average size of awards for fiscal year 1987 will be $820,000 as opposed to approximately $240,000 in fiscal year 1986. No school system that requests assistance in fiscal year 1987 should be denied assistance because of inadequate funding.

Question: Will the current distribution of appropriated funds by race, national origin, and sex desegregation issues be maintained under your proposed consolidation of desegregation assistance centers?

Answer: Of the funds available for desegregation assistance center awards in fiscal year 1986, approximately 45 percent were awarded for race desegregation activities, 25 percent for sex desegregation, and 30 percent for national origin desegregation. Under the proposed changes to the desegregation assistance center program, centers will have the flexibility to use the funds they receive to respond to requests for assistance in each of the desegregation areas. We will not require each center to expend a given proportion of its grant for each desegregation area.

Question: How can the consolidated desegregation assistance centers continue to meet their current level of commitment when their funding will fall by 14 percent from FY 1986 to FY 1987?

Answer: Each desegregation assistance center will have greater responsibilities in terms of the assistance it must be capable of providing to school districts. However, in spite of the overall reduction in the share of program funds used for the desegregation assistance center program, the average size of center awards will increase, and the consolidated program will provide better planned and coordinated assistance to school districts and could be less expensive in terms of administrative costs.

CLOSING CIVIL RIGHTS DESEGREGATION CENTERS

Question: Mr. Carnes, your budget requests that we terminate funding for Civil Rights Training and Advisory Services. The Administration has also proposed through regulation to reduce the number of Desegregation Centers from forty to 10. You would no longer fund separate centers addressing race discrimination, sex discrimination and discrimination based on national origin, and instead would fund just one center for each region of the country. Is it the Administration's position that these forms of discrimination are essentially the same and can, therefore, be addressed by one center?

Answer: It is not the Administration's position that discrimination on the basis of race, sex, and national origin is the same and can therefore be addressed by one center. The Department's proposed rules clearly recognize and define the differences in these three forms of discrimination and require that each desegregation assistance center be capable of providing technical assistance in each of the three desegregation areas. Our experience in implementing the desegregation assistance center program shows that a single center is capable of providing technical assistance and training to address race, sex, and national origin desegregation concerns. The University of Miami and the Northwest Regional Educational Laboratory each have grants in all three desegregation assistance areas, and five other recipients of desegregation assistance center awards provide assistance in two of the three desegregation assistance areas.

Question: What kind of response have you received from the authorizing committees and the minority communities for this change?

Answer: The Department has received only 25 responses to the invitation to comment on the proposed regulations for the Title IV program. Of these, one has come from an authorizing committee.

The letter, from the Chairman of the House Committee on Education and Labor, expressed concerns about the proposed reduction in the number of centers from 40 to 10, and the requirement that each center provide assistance in all three desegregation areas.

Organizations representing minority communities have not submitted comments on the proposed regulations.

Question: Given the growth we have seen in racial incidents in communities and schools and the influx of a wider variety of ethnic minorities, is this the right time to reduce our commitment to these centers?

Answer: The growth in racial incidents in some communities is not limited to our public schools. Many of these incidents may involve violations of the civil rights of individuals, and need to be referred to or addressed by appropriate law enforcement officials. Racial incidents in our public schools are, however, indicative of the complexity of the desegregation problems that school authorities must address today. We believe that these problems can be handled most effectively by desegregation assistance centers that are capable of providing comprehensive programs that can assist in the resolution of problems based on race, sex, or national origin. We believe that such assistance, when provided by a single center, is more easily planned and coordinated with school districts and State educational agencies, and can be better tailored to the needs of a particular school district requesting assistance.

Question: Why are you pursuing this consolidation when your 1985 study showed that 60 percent of the program directors disagreed with the contention that it is counter-productive to support separate centers?

Answer: Currently, two recipients of desegregation assistance center awards have awards to provide assistance in all three desegregation areas, and five others have awards to provide assistance in two of the three desegregation areas (for example, race and sex desegregation). Therefore, we know that the concept of a single center providing assistance in all three desegregation areas is viable. We believe that requiring the centers to provide assistance in all three desegregation assistance areas will improve their capability to provide comprehensive, long-term assistance to school districts whose needs cover a broad range of issues related to race, sex, and national origin desegregation.

FOLLOW THROUGH

Question: Your budget justification states that the basic objectives of the Follow Through program have been met. Are the currently funded Follow Through programs not continuing to develop innovative educational methods and are these methods not being disseminated to other local educational agencies and schools? Isn't your proposal to terminate funding for Follow Through inconsistent with the Department's focus on spreading the word on "What Works" in education?

Answer: The currently funded Follow Through projects are implementing innovative educational methods that have already been developed. Although the projects are disseminating these methods

to other local educational agencies and schools, the National Diffusion Network has also been used to disseminate exemplary Follow Through projects and can continue to do so after the termination of Follow Through as a categorical program. Also, in 1987, Follow Through's contributions to compensatory education will be documented in a comprehensive report collaborated on by current Follow Through sponsors. The Department is committed to spreading the word on "what works" in education, as evidenced by the recent publications, including: What Works: Research About Teaching and Learning; First Lessons; Effective Compensatory Education Sourcebook; and the soon to be published Schools That Work: Educating Disadvantaged Children.

Question: Your budget materials state that the Department will implement numerous changes to the program. Please summarize these changes.

Answer: Following are the major changes the Department plans to implement in the Follow Through program in 1988, if funding is available for the program in that year:

- Grants will no longer be limited to continuation awards only. A grant competition will be held and will consider new as well as existing grantees.

- Resource center grants will be discontinued, as dissemination activities can be performed by sponsors or local educational agencies (LEAs).

- The Department will fund sponsors that apply jointly with LEA projects, in addition to self-sponsored LEA projects. Sponsors will be allowed to serve no more than five LEA projects.

- Greater emphasis will be placed on the demonstration and dissemination of effective approaches specifically designed to improve the school performance of low-income children in kindergarten and early primary grades.

Questions Submitted by Senator Lowell P. Weicker, Jr.

CHAPTER 2 -- DISCRETIONARY ACTIVITIES

Question: You are seeking the same amount of funding for Chapter 2--Secretary's Discretionary account as was appropriated in FY 87 but you would eliminate all of the congressionally-mandated set-asides, giving you $29.3 million in unearmarked funds for your complete discretion. Your documents indicate, however, that it is "the Department's current intention to fund the mandated programs... at approximately their FY 87 levels."

If that is your intention, then why do you wish to eliminate the congressionally authorized set-asides?

Answer: Our purpose is to allow the movement of funds both between programs presently mandated, and between those programs and the small amount over which the Secretary truly has discretion, depending on the quality and importance of the applications received

each year and any priorities that have been established. Sometimes we receive more good applications than we can fund under a particular program, and sometimes we have too few good ones for a given program or competition. We do not plan to eliminate any of the programs presently mandated unless they are replaced by other legislation, such as the regional centers previously funded under the set-aside for the Alcohol and Drug Abuse Education program, which are now funded under the Drug-Free Schools and Communities Act.

Question: We also note that for next year, you are not seeking the $3 million appropriation for the alcohol and drug abuse regional training centers because of the existence of the Drug-Free Schools Act funds which already supports the Centers. But you are not seeking to reduce your discretionary fund by that $3 million. What are your plans for the use of this "freed up" $3 million in additional discretionary funds?

Answer: The $3 million will be used primarily to supplement that portion of the Secretary's Discretionary Fund for which there is at present no mandate. S-me of it may be used to supplement activities of the mandated programs.

Question: What new initiatives will be supported and at what levels?

Answer: We have not established our priorities for fiscal year 1988 yet. Possibilities include demonstrations of effective drop-out prevention activities, and programs for high-ability students in poor areas.

Question: What new authorizations is the Department seeking to give the Secretary new discretionary spending authority?

Answer: The Department has requested that Title II of the Education for Economic Security Act be replaced with the Christa McAuliffe Teacher Training and Improvement Act. The proposed act would allow us to fund activities to improve education in a wider range of subject areas than Title II presently does. It would also increase the discretionary funds from 9 percent under Title II to 20 percent under the proposed Christa McAuliffe Teacher Training and Improvement Act.

LAW-RELATED EDUCATION -- CHARACTER FORMATION

Question: The purpose of the Law-Related Education program is to enable nonlawyers, including children, youth and adults to be better informed concerning the law, the legal process, the legal system, and the fundamental principles on which these are based. Your budget documents indicate that for FY 86 and 87, priorities for funding include projects that develop "new approaches or techniques" in Law-Related Education. You indicate that the "Secretary has been particularly interested in projects that improve students' character...." What do you see as the appropriate role of the Federal Government in the area of character formation?

Answer: The appropriate role of the Federal Government in the area of character formation is to challenge the American people to consider character--those fundamental qualities of mind and heart, such as thoughtfulness, kindness, honesty, respect for

the law, knowing right from wrong, respect for parents and teachers, diligence, self-sacrifice, hard work, fairness, self-discipline, and love of country--as the basis for sound judgment and as an essential aspect of educational excellence.

Question: What types of programs to improve students' character are being supported in the Law-Related Education program?

Answer: The following are examples of how the Law-Related Education program is supporting programs to improve students' character.

- The Project Citizenship of the Arizona Center for Law-Related Education makes high school seniors aware of the importance of citizenship and of performing community services by training them to use specially developed curricula to tutor immigrants for their U.S. Government and history examinations, which they must pass to become citizens of the United States.

- The New York City Board of Education School District Number 18, in Brooklyn, fosters student character development by using curricula written to promote an informed respect for the law and an understanding of the rights and duties of American citizenship.

- The Minnesota Center for Community Legal Education, Hamline University, is developing ten lessons on the Constitution for secondary students. The lessons will cover fundamental legal principals, the Bill of Rights, and issues such as justice, freedom, authority, and punishment. Lessons on Constitutional concepts also will be written for elementary students in order to promote character development of youngsters by helping them to understand and respect the law. The lessons include mock trials to be conducted by students.

- The St. Louis City Public Schools Project Law and Citizenship Education will influence and support positive character development by preparing children (specifically third graders) to become knowledgable, responsible citizens. Visitors, such as lawyers and educators, will be invited into the classroom, and parents will be encouraged to attend on those days.

Question: Approximately how much has the Department spent under Secretary Bennett in the area of students' character formation? (Please include the Secretary's Chapter 2 Discretionary Fund and the recent Department supported character formation conference in your calculations.)

Answer: No funds are being expended from the Secretary's Discretionary Fund for projects related to student character formation from either fiscal year 1986 or 1987 appropriations. Eleven projects were funded under the priority established for activities focused on the formation of character in the Content, Character, and Choice competition. That competition was funded from the fiscal year 1985 Secretary's Discretionary Fund, and the cost of the eleven projects was $1,537,000. Two meetings have been held by projects funded under that competition, one coordinated by the National School Boards Association and the other by Bowling Green State University in Ohio. Another meeting, focused on research

rather than the provision of services, is being sponsored by the Department's Office of Educational Research and Improvement, but has not yet taken place. Its cost, including the preparation of a number of papers to be delivered at the meeting, is estimated to be $81,000. Those funds will come from the Education Research and Statistics appropriation.

MAGNET SCHOOLS

Question: Do you have any plans to evaluate the Magnet Schools Assistance program with regard to its impact on school desegregation in school districts that have been funded?

Answer: The Department has no immediate plans to evaluate the Magnet Schools Assistance program in terms of its impact on desegregation in school districts that have been funded. However, a report on school desegregation entitled, The Carrot or the Stick in School Desegregation Policy? was recently completed by Christine Rossell and Ruth Clark of Boston University under a grant from NIE. The researchers assessed the effectiveness of both voluntary and mandatory desegregation plans in 20 school districts. Major findings included the following:

- Voluntary magnet school desegregation plans are more likely to produce more interracial exposure over the long term than are mandatory desegregation plans with magnet components. Moreover, voluntary programs appear to enhance the reputation of the school system, which is particularly important in high-proportion minority school systems.

- Mandatory plans can be dismantled and replaced with comprehensive magnet-voluntary desegregation plans without causing resegregation.

- In school districts with minority enrollment above 30 percent, mandatory desegregation plans have a negative effect on white enrollment over the long run. Districts do not recover the white students they lose during the implementation phase of the desegregation effort.

- Confirming earlier (1985) research by Rossell, the study found that the most important variable in predicting a magnet program's success as a desegration mechanism is its location. While less than one-half of the magnet programs in the study were in minority neighborhoods, locating schools in those neighborhoods increases efficiency and equity.

- The differences in the level of burden from desegregation on minorities and on whites are relatively small.

The researchers suggested that voluntary desegregation plans include the following components:

- A transfer program which would allow any student whose race is in a majority at his/her present school to transfer to a school where his/her race is in a minority. Transfers would only be permitted if they promoted desegregation.

- Location of the vast majority of magnet programs in minority neighborhoods to promote efficiency and equity;
- An aggressive public awareness and recruitment campaign to inform parents of available programs;
- Comprehensive desegregation goals for the district; and
- Parental selection of schools within small districts, ending the use of attendance zones.

Overall policy recommendations included the following:

- If school districts have a choice, they should use voluntary comprehensive magnet plans to desegregate their schools. Such plans will result in a higher level of interracial exposure than could be obtained through plans that are mandatory.
- Most magnet programs should be in minority locations for reasons of efficiency and equity. It makes sense to spend limited resources on minority schools where additional dollars are needed most. Raising the status of minority schools through establishing magnet programs improves equity.

Rossell is well regarded in the field of desegregation evaluation and this latest effort provides ample evidence that voluntary desegregation plans that use magnet schools can work.

Question: How many of the districts that participated in the program are implementing desegregation plans ordered by courts or State agencies, as opposed to voluntarily adopted desegregation plans?

Answer: Of the 44 school districts that currently have Magnet Schools Assistance program grants, 16 are implementing plans ordered by a Federal court, 6 are implementing State court or agency required plans, 2 are implementing Office for Civil Rights approved plans, and 20 have voluntary plans.

Question: This program has been level funded at its fully authorized amount of $75 million for the past few years. Yet we understand that the demand for Magnet School funding far outpaces the availability of funding. In this recent application cycle just completed, how many proposals for Magnet School Assistance were funded out of how many requests on file?

Answer: The fiscal year 1987 application cycle has not been completed. The Magnet Schools Assistance program received 126 applications, and expects to fund approximately 38 grantees.

Question: How much more is therefore needed to meet this demand in desegregation assistance under the successful Magnet School program?

Answer: The highest ranking 38 applications, which represent those applicants most likely to receive awards, requested a total

of $97,038,244 as compared to the $75,000,000 available for Magnet Schools Assistance. The total amount requested by all applications was $256,692,294. Actual need, however, would be significantly less, since this figure includes the costs of proposed projects of very low overall quality, and some unallowable and excessive proposed costs.

IMPACT AID

Questions Submitted by the Subcommittee

PROPOSAL TO TERMINATE "b" PAYMENTS

Question: Your FY 1988 budget request proposes to terminate Impact Aid payments on behalf of 3(b) students because the presence of these children does not pose a "significant" or "genuine" burden to their local school districts. Can you provide documentation or cite research studies or evaluations that support this position?

Answer: We know that real property taxes are paid either on the place of employment of the parents or the place of residence of the families of "b" students. These families also generally pay other types of taxes at the same rate as non-federally connected families. In many instances, the Federal activities "b" families are connected with generate much more revenue to their communities than the educational services for these children cost. Further, based on information provided by school districts in their applications, "b" payments represent an average of less than one-half of one percent of the districts' budgets.

ELIMINATION OF "b" PAYMENTS AND QUALITY OF EDUCATION

Question: Do you have any evidence that suggests that the elimination of 3(b) payments would not adversely affect the quality of education local school districts are able to provide to 3(b) students, particularly children of military personnel? How would local school districts with several thousand 3(b) military children absorb the costs of educating these children if your proposal to terminate 3(b) payments were enacted?

Answer: The effects of the elimination of "b" payments will vary by district. Since "b" payments represent such a small proportion of most districts' total budgets, their elimination is not expected to have a significant impact on the quality of the educational programs of most districts. In some cases, districts have been able to maintain or reduce their property tax rates below the levels of comparable districts in their States because of the payments on behalf of "b" students. Such districts may need to reduce their expenditures, increase their property taxes, or seek other sources of funds.

Question: You indicate in your justifications that the presence of 3(b) students does not pose a significant burden on their local school districts. Are you saying that "Super b" school districts--school districts that have 20 percent or more of their total student enrollment comprised of 3(b) students--would not encounter financial difficulties if 3(b) payments were terminated?

Answer: Again, this would vary by district. Some districts have deliberately reduced their revenues from other sources because they have received "b" payments. Such districts may need to increase their revenues or reduce their expenditures, or both.

Question: What percentage of each of these "Super b" school districts' current operating budgets is supported by 3(b) payments?

Answer: There were 323 "Super b" districts in fiscal year 1986. The percentage their "b" payments comprised of their total current expenditures for that year, as reported on their application forms, ranged from one-tenth of one percent to 4.6 percent.

ELIMINATION OF "b" PAYMENTS AND ELIGIBILITY FOR "a" PAYMENTS

Question: If your proposal to terminate 3(b) payments were enacted, 3(b) children would not be counted in determining whether a local school district were eligible for Impact Aid assistance under section 3(a). How many local school districts currently eligible for 3(a) payments would become ineligible for these payments because they could not count their 3(b) children in establishing eligibility for Impact Aid assistance under section 3(a)? Could you provide us with a State-by-State breakout of these 3(a) school districts that would become ineligible for Impact Aid assistance if your proposal to terminate 3(b) payments were enacted?

Answer: The most complete data available on numbers and proportions of "a" children for each Section 3 applicant district are for fiscal year 1986. If those figures remain constant for fiscal year 1988 and "b" children cannot be counted to meet the threshold eligiblity requirements for Section 3 payments, some 600 districts would not be eligible to receive "a" payments. The following table shows where those districts are located and the amounts of their 1986 "a" payments.

1986 "a" Districts Estimated to be Ineligible for 1988 "a" Payments

State	1986 "a" Districts Ineligible in 1988	Total No. of "a" Districts in 1986	Range of 1986 "a" Payments for Districts Ineligible in 1988
Alabama	14	18	$85 - $41,762
Alaska	4	49	7,535 - 259,088
Arizona	10	52	277 - 542,907
Arkansas	8	10	76 - 17,211
California	73	168	79 - 217,229
Colorado	15	21	1,008 - 145,141
Connecticut	4	5	4,862 - 27,834
Florida	6	16	168 - 120,143
Georgia	12	20	75 - 183,010
Idaho	13	25	880 - 36,979
Illinois	19	28	175 - 51,377
Indiana	6	8	155 - 10,631
Iowa	2	3	5,651 - 7,882
Kansas	1	7	954
Kentucky	11	11	153 - 16,189
Louisiana	5	8	1,147 - 132,338
Maine	1	14	11,277
Maryland	8	12	728 - 277,407
Massachusetts	27	32	100 - 148,496
Michigan	7	16	439 - 44,420
Minnesota	7	24	5,919 - 43,122
Mississippi	9	13	152 - 5,062
Missouri	13	16	230 - 27,279
Montana	13	76	510 - 11,923
Nebraska	4	11	1,656 - 27,757
Nevada	6	14	1,032 - 191,726

1986 "a" Districts Estimated to be Ineligible for 1988 "a" Payments
(cont.)

State	1986 "a" Districts Ineligible in 1988	Total No. of "a" Districts in 1986	Range of 1986 "a" Payments for Districts Ineligible in 1988
New Jersey	11	21	100 - 78,227
New Mexico	11	34	978 - 123,602
New York	28	41	132 - 99,742
North Carolina	16	22	232 - 43,647
North Dakota	2	21	1,000 - 1,516
Ohio	5	8	94 - 7,291
Oklahoma	60	273	155 - 70,506
Oregon	23	39	385 - 103,992
Pennsylvania	18	20	101 - 101,748
Rhode Island	4	7	316 - 51,377
South Carolina	3	8	1,054 - 61,961
South Dakota	5	32	519 - 12,453
Tennessee	13	15	156 - 18,409
Texas	27	44	221 - 227,521
Utah	6	14	1,021 - 71,533
Virginia	17	24	654 - 286,932
Washington	41	86	168 - 179,111
West Virginia	8	8	470 - 22,740
Wisconsin	13	29	102 - 41,602
Wyoming	6	11	1,932 - 12,410
Virgin Islands	1	1	10,016
47 States	616	1,435	75 - 542,907

ELIMINATION OF "b" PAYMENTS AND ELIGIBILITY FOR 3(d)(2)(B) FUNDS

Question: If your proposal to terminate 3(b) payments were enacted, 3(b) children would not be counted in determining whether a local school district were eligible for supplemental Impact Aid assistance under section 3(d)(2)(B). How many local school districts currently eligible for these supplemental payments would become ineligible for these payments because they could not count their 3(b) children in establishing eligibility for Impact Aid assistance under section 3(d)(2)(B)? Could you provide us with a list of these school districts that would become ineligible for this supplemental Impact Aid assistance if your proposal to terminate 3(b) payments were enacted?

Answer: The most recent year for which final determinations of eligibility for additional funding under Section 3(d)(2)(B) have been made is 1985. Three districts were eligible for 3(d)(2)(B) funding that year: Bellevue, Nebraska; Douglas, South Dakota; and York County, Virginia. Only the Douglas school district had more than 50 percent "a" children that year and thus could have met the threshold eligibility requirement of 50 percent federally connected children based on its "a" children alone.

For 1986, nine districts are tentatively eligible for 3(d)(2)(B) funding. They are: Lompoc, California; Sierra Sands, California; Liberty County, Georgia; Limestone, Maine; Bellevue, Nebraska; North Hanover, New Jersey; Lawton, Oklahoma; Douglas, South Dakota; and

York County, Virginia. Of these, only the Douglas and Limestone school districts had more than 50 percent "a" children that year and thus could have met the threshold eligibility requirement of 50 percent federally connected children based on their "a" children alone.

FISCAL YEAR 1988 DISTRIBUTION OF "a" PAYMENTS

Question: In your justifications you indicate that your proposed distribution formula for 3(a) payments is more equitable because it reflects more consistently the burden represented by different proportions of 3(a) students. Please supply the Committee with a State-by-State breakout of all school districts' 3(a) estimated allocations in FY 1987 and their projected 3(a) allocations under your proposed distribution formula for FY 1988.

Answer: The following table provides this information. The most recent year for which actual 3(a) payment data are available is 1986. These amounts are also included in the table as another point of reference. Estimated 1987 and 1988 payments are based on projections of 1986 data.

Distribution of "a" Payments, 1986-88

State or Outlying Area	1986 1/ Appropriation	1987 1/2/ Appropriation	1988 1/2/ Request
TOTAL	$490,941,000	$533,000,000	$533,000,000
Alabama	1,361,385	1,548,924	662,269
Alaska	69,883,307	72,258,648	81,778,465
Arizona	48,861,080	51,385,777	56,931,570
Arkansas	1,893,433	2,051,753	1,709,841
California	49,205,168	54,492,691	51,344,699
Colorado	5,427,076	5,902,383	5,683,483
Connecticut	4,826,588	5,073,331	5,472,901
Delaware	---	---	---
Florida	7,178,138	8,166,292	6,027,559
Georgia	1,905,362	2,168,261	875,482
Hawaii	9,671,183	20,812,940	19,961,985
Idaho	3,396,714	3,646,589	3,693,946
Illinois	8,422,378	9,039,480	9,499,723
Indiana	1,500,167	1,599,655	1,462,581
Iowa	147,152	167,408	219,426
Kansas	7,173,675	7,474,039	8,395,072
Kentucky	51,954	56,280	---
Louisiana	4,779,170	5,112,836	4,460,994
Maine	3,410,698	3,593,313	3,901,645
Maryland	6,316,699	7,190,775	2,914,913
Massachusetts	3,980,005	4,322,629	4,158,880
Michigan	5,995,173	6,369,258	6,941,339
Minnesota	4,056,679	4,388,829	4,413,400
Mississippi	2,512,415	2,685,229	2,426,090
Missouri	5,200,985	5,477,073	6,132,727

Distribution of "a" Payments, 1986-88 (cont.)

State or Outlying Area	1986 1/ Appropriation	1987 1/2/ Appropriation	1988 1/2/ Request
Montana	$21,536,364	$22,381,907	$25,237,317
Nebraska	8,673,894	9,157,138	9,604,211
Nevada	2,728,018	3,061,712	1,761,961
New Hampshire	2,188,251	2,314,812	2,392,912
New Jersey	9,389,017	10,029,542	10,506,767
New Mexico	31,901,534	34,503,680	37,718,567
New York	7,035,067	7,827,100	6,967,387
North Carolina	3,198,684	3,582,878	3,162,971
North Dakota	9,861,903	10,365,253	11,172,052
Ohio	2,084,673	2,246,778	2,514,228
Oklahoma	18,557,561	20,775,943	19,680,544
Oregon	2,596,387	2,770,813	2,316,658
Pennsylvania	1,191,763	1,312,129	287,728
Rhode Island	2,112,386	2,262,5 1	2,375,691
South Carolina	3,813,939	4,951,026	5,084,607
South Dakota	21,459,638	20,015,189	22,463,703
Tennessee	670,997	760,182	329,238
Texas	18,849,709	20,145,164	18,646,734
Utah	4,296,096	4,666,604	3,776,331
Vermont	---	---	---
Virginia	16,953,326	18,673,715	12,143,848
Washington	19,988,910	21,313,470	21,563,320
West Virginia	34,496	39,106	---
Wisconsin	4,878,486	5,234,910	5,407,860
Wyoming	7,135,637	7,174,633	7,678,741
District of Columbia	818,253	878,665	409,233
Guam	1,374,709	1,563,944	728,397
Puerto Rico	---	---	---
Virgin Islands	10,016	6,720	---
Undistributed	10,444,702	10,000,000	10,000,000

1/ Funds are distributed to LEAs based on numbers and percentages of federally connected children, national and State average per pupil expenditure data from two years preceding, and the formula contained in the annual appropriations law.

2/ All figures are estimates based on projections of prior-year data.

TRANSFER OF SECTION 6 SCHOOLS AND PROPOSED DISTRIBUTION FORMULA

Question: The Military Construction Act of 1986 directs the Department of Defense to develop a plan for the transfer of Section 6 schools by July 1, 1990, to the local school districts in

the States in which such schools are located. In your justifications you indicate that the proposed termination of all Section 6 arrangements would result in approximately 30,000 additional children becoming eligible for Section 3 payments. Can you estimate for us what the effects would be of this eligibility increase on the distribution of Section 3 payments under both current law and your proposed distribution formula?

Answer: It is not possible to estimate the effects of the transfer of the Section 6 schools to local school districts with any reliability, because these effects would depend on which districts the students are transferred to and whether those districts would become "Super a" districts as a result. We would also anticipate that additional funds would be appropriated for Section 3 payments when these transfers actually take place.

CURRENT DOD FUNDING OF SECTION 6 SCHOOLS

Question: How much money is the Department of Defense currently spending to support Section 6 schools?

Answer: For fiscal year 1986, the Department of Defense (DoD) spent $122.2 million for maintenance and operation costs and $29.6 million for construction expenditures for Section 6 schools. For 1987, DoD is anticipating spending $136.8 million for maintenance and operation of these schools. The Congress did not authorize expenditures for construction projects for this year while the issue of transferring these schools is pending.

Question: Will any of these Department of Defense funds be transferred to the local school districts affected by the proposed transfer of the Section 6 schools?

Answer: Once the Section 6 schools and students are transferred to local school districts, they would no longer be eligible for Section 6 funding. If DoD continues to have authority to provide funds only under Section 6, no funds could be provided to the school districts by DoD. However, the districts would presumably become eligible for Section 3 payments from the Department of Education for these students. We would anticipate that the Congress would provide additional funds for Section 3 payments for the former Section 6 students so that Section 3 payments to other districts would not be significantly reduced.

PROPOSED MINIMUM PAYMENT PROVISION

Question: You are proposing that local school districts must have a projected Section 3 payment of more than $5,000 to be eligible to receive Impact Aid assistance. In your justifications you indicate that in 1986, 810 local school districts--approximately 30 percent of all school districts that received Impact Aid assistance under Section 3--received payments of less than $5,000. Can you provide us with the respective percentages of each of these school districts' current operating budgets that were supported by Section 3 payments in fiscal year 1986?

Answer: A number of the payments of less than $5,000 have been increased since the justifications were written. There are

currently 694 Section 3 payments--representing approximately 26 percent of all Section 3 payments for fiscal year 1986--of less than $5,000. The following table shows the percentages of total current expenditures that these payments represented for their districts. (The total current expenditure figures were taken from school districts' application forms, but, since districts are not required to report them and they are not verified, they may not be reliable.)

Number of School Districts	Sec. 3 Payments as Percentage of Total Current Expenditures
355	0.01 - 0.05%
195	0.06 - 0.10%
93	0.11 - 0.19%
32	0.21 - 0.48%
11	0.54 - 0.99%
5	1.37 - 1.82%
3	2.00 - 2.66%

TRANSFER OF BIA STUDENTS TO PUBLIC SCHOOLS

Question: In your justifications you state that if the Bureau of Indian Affairs (BIA) encourages children currently attending BIA schools to transfer to public schools, these children will probably become eligible for Impact Aid payments under Section 3(a). Can you estimate for us what the effects would be of this eligibility increase on the distribution of section 3(a) payments under both current law and your proposed distribution formula?

Answer: It is not possible to estimate the effects of the transfer of students from BIA schools to local public schools with any reliability, because these effects would depend on how many students transferred, which districts the students are transferred to, and whether those districts would become "Super a" districts as a result.

PRELIMINARY PAYMENT POLICY PROPOSAL

Question: Please explain why you would make larger preliminary payments to "Super a" school districts than to non-"Super a" school districts? Is the risk of overpayments greater in the case of non-"Super a" school districts than in the case of "Super a" school districts? If so, can you provide us with evidence to support this position?

Answer: We believe the risk of overpayments as the result of preliminary payments is greater for non-"Super a" districts than for "Super a" districts. This is the case because funding for "Super a" districts remains fairly stable while the funds available and the formula for payments to non-"Super a" districts change almost every year.

Overpayments based on preliminary payments are even more likely for a district that is "Super a" one year and becomes non-

"Super a" the next. If the district is paid 100 percent of entitlement the year it is a "Super a" district, it would receive 75 percent of that amount as a preliminary payment the following year. However, if its proportion of "a" children has declined to below 20 percent in the second year, the district may be entitled to be paid only 40 percent of entitlement that year. Thus, through its preliminary payment, it will have been paid almost twice the payment it is actually eligible for that year.

CONSTRUCTION FUNDING PROPOSAL FOR 1987 AND 1988

Question: Please justify your proposed request to rescind most of the FY 1987 funds and reduce FY 1988 funds for school construction activities when the current backlog of requests for funding of school construction projects is estimated to total $350 million.

Answer: The current backlog of requests for construction funds is approximately $255 million. The Department proposed to rescind $17.5 million of the 1987 appropriation for construction activities and reduce its request for construction funds in 1988 to $5 million as part of the President's program to control the Federal deficit, eliminate unnecessary spending, and direct Federal support to priority programs.

BACKLOG OF REQUESTS FOR CONSTRUCTION FUNDS

Question: In your FY 1988 budget proposal, you have requested school construction funds only for Sections 14(a) and 14(b) for grants to school districts that serve large numbers of Indian children or contain large areas of Indian lands. What is the current backlog of requests for funding of school construction projects under Sections 14(a) and 14(b)?

Answer: Applications from 89 school districts requesting $181.6 million are currently awaiting funding under Sections 14(a) and 14(b).

Question: How does this backlog of requests for construction funds compare to the backlogs of requests for construction funds under other sections of the law?

Answer: For Sections 5 and 14(c), there are currently 113 applications pending with funding requests totaling $73 million.

OTHER SOURCES OF FUNDS FOR CONSTRUCTION PROJECTS

Question: You indicate in your justifications that school construction applicants may be able to find funds from other sources enabling them to complete their school construction projects without Federal Impact Aid assistance. What other funds are available to complete these school construction projects?

Answer: Some States provide grants or loans to school districts for school construction projects. In other cases, school districts can raise funds locally through small increases in their tax levies on real property or, by rearranging their priorities, use other available funds for this purpose.

STATUS OF CONSTRUCTION PROJECTS

Question: How many school construction projects begun with funding under the Impact Aid program are not yet completed?

Answer: There are currently 82 ongoing construction projects.

Question: Of those completed, how many have been completed with non-Federal funds?

Answer: Virtually all projects funded under Sections 5 and 14(c) are partially supported by non-Federal funds.

Question: Could you provide us with a list of all the unfinished Impact Aid school construction projects?

Answer: The following school districts have ongoing construction projects partially or fully funded by Impact Aid grants.

Ongoing Impact Aid Construction Projects

Sections 5 and 14(c) projects:

Arizona

Grand Canyon USD
Sunnyside USD
Yuma ESD

Arkansas

Mountainburg SD

California

Lemoore Union HSD
San Diego USD

Florida

Clay County SD

Georgia

Camden County SD

Idaho

Lapwia SD

Missouri

Winona SD

Nebraska

Macy PSD

Ohio

Wayne Township SD

Oklahoma

Talihina ISD

Texas

Judson ISD

Virginia

Virginia Beach SD

Wyoming

Laramie County SD

Sections 14(a) and (b) projects:

Arizona

Chinle SD
Ganado USD
Window Rock HSD

Maine

Indian Island SD

Minnesota

Red Lake ISD

Montana

Browning HSD
Harlem HSD

New Mexico

Gallup-McKinley SD

North Dakota

Fort Yates PSD
Warwick PSD

Utah

San Juan SD

Washington

Keller SD
Wellpinit SD

Ongoing Impact Aid Construction Projects (cont.)

Section 10 projects:

Alaska

Adak Naval Station (2 projects)
Coast Guard Support Center
Eileson AFB (5 projects)
Elmendorf AFB
Fort Greeley (2 projects)
Fort Richardson
Fort Wainwright (3 projects)

Arizona

Williams AFB
Fort Huachuca

California

Edwards AFB (2 projects)
Mare Island Naval Station
(2 projects)
Mather AFB
Sierra Ordnance
Travis AFB

Georgia

Fort Benning (2 projects)

Kansas

Fort Riley (3 projects)

Kentucky

Fort Campbell

Missouri

Fort Leonard Wood
(8 projects)
Whiteman AFB (3 projects)

New Hampshire

Pease AFB

New Jersey

Fort Dix
McGuire AFB

New Mexico

White Sands Missile Range

New York

Plattsburgh AFB (4 projects)

Texas

Fort Sam Houston
Randolph AFB

Washington

Fort Lewis/McChord AFB
(2 projects)

Questions Submitted by Senator Quentin N. Burdick

COST OF EDUCATION VS FUNDING REQUEST FOR IMPACT AID

Question: Surely you understand that the cost of public education has increased disproportionately to the national cost of living in other areas. Knowing this, how can you justify not recommending significant increases in Impact Aid?

Answer: We acknowledge that education expenditures have increased at a greater rate than general inflation in recent years. However, most of the increases are attributable to increased State requirements and funding.

Impact Aid payments are intended to supplement local resources for the support of public elementary and secondary educational programs. They are expected to approximate funds raised locally for non-Federal children. Since some children currently eligible

for payments do not represent significant burdens to their school districts and since the local share of funds for education actually declined from 1984 to 1985, we believe the budget request for Impact Aid is appropriate.

BASIS FOR PROPOSAL TO END "b" PAYMENTS

Question: It is my understanding that three major studies of Impact Aid, the last one being the Carter Presidential Commission, have all recommended continued funding of all segments of this program. On what basis does the Administration continue to recommend the elimination of category "b"?

Answer: Any school district that currently receives "b" payments naturally wishes to see them continue. In many cases these districts have been receiving "b" payments for years and have grown accustomed to them. However, the purpose of Impact Aid payments is to compensate districts that experience significant financial burdens due to the presence of tax-exempt Federal property and federally connected children. This Administration, like many preceding it, does not believe "b" children represent such burdens to school districts.

POTENTIAL FOR TRANSFERS OF STUDENTS FROM PUBLIC SCHOOLS

Question: One professional association concerned with federally impacted schools indicates that absorbing a federally connected child into the public school system is cheaper by as much as 50% than educating this same child in an Indian or military school. Are there any aspects of your proposal that may result in the shift of some federally connected children from the public school system to military or Indian schools?

Answer: We know of no aspect of our budget proposal that would result in the shift of federally connected students from the public school system to military or Indian schools.

QUESTIONS SUBMITTED BY SENATOR LOWELL P. WEICKER, JR.

SCHOOL CONSTRUCTION FUNDING REQUEST

Question: Under the Impact Aid Construction program for FY 1988, you are requesting funds only for schools in districts serving large numbers of Indian children or which contain large areas of Indian lands. You state that construction for other impacted schools, i.e., military bases, or other Federal lands would have to be "postponed until the Federal deficit is under control." (P. 80).

First, let me say I support your efforts on behalf of Indian school construction. But aren't the other categories of Impact Aid schools in similar states of disrepair?

Answer: We believe that districts serving students who reside on Indian lands are more in need of assistance than other districts serving federally connected students. Since Indian lands are generally tax exempt, such districts have very limited, if any,

real property tax bases. Thus, their local revenue-raising ability is severely restricted. The existing school buildings in these districts also seem to be older, of poorer quality, and in greater disrepair than those of other districts. There are currently pending applications from districts serving students residing on Indian lands requesting nearly $182 million for school construction projects. Pending applications from other districts request a total of $73 million.

Question: What was your basis for determining that schools attended by Indian children are in worse condition than those attended by military children? Aren't they all equally deserving?

Answer: Our conclusion that districts serving students residing on Indian lands were in the greatest need of funds was based on a number of factors. They included our knowledge of the limited resources of such districts, applications for funds from these districts, communication with the districts and other governmental officials, a sample survey conducted by Department staff in 1979, and site visits by Department staff.

Question: Are you advising those schools or school districts for which funds would not be available under your proposal that they will not be receiving badly needed school construction funds until the deficit is under control?

Answer: If the Congress accepts our budget proposal, we will notify the affected districts that funds are not available for their school construction projects.

BILINGUAL EDUCATION

Questions Submitted by the Subcommittee

DURATION OF ASSISTANCE

Question: How does the current Federal funding policy that sets various limitations on the number of years a school district may receive assistance under the Bilingual Education Act address the needs of school districts experiencing substantial influxes of limited English proficient students?

Answer: Grants to school districts for transitional bilingual education, developmental bilingual education, and special alternative instruction are limited by statute to three years, but may be renewed for two additional years if the project meets certain requirements. Grants for academic excellence and family English literacy are for three years. Any change in the duration of assistance for these grants would require statutory change. In the case of the relatively small special populations and instructional materials activities, the Department makes grants for from one to three years. Districts that incur an influx of a new language group may apply for additional grants under the program.

Question: What criteria has the Department developed to differentiate those school districts that have failed to build local program capacity for meeting the needs of a relatively stable limited English proficient student population from those school districts providing programs for steadily increasing numbers of these students entering their schools?

Answer: The Department is also very concerned with the question of how best to ensure that school districts will build their capacity to operate these programs in the absence of Federal funding. Several provisions in the program regulations published last year address this problem. Under these regulations, applications for most Part A programs must include information to demonstrate how the project will build local capacity to continue to operate such programs once Federal funds are reduced or no longer available. Depending on the quality of this plan, applicants may receive up to 30 points in the selection process. If an application is funded, the grantee's capacity building plan must be implemented as it was presented in the application. Prior grantees may apply for a new grant after the expiration of the original grant period. However, applicants that have never before received a grant or that propose to serve a new language group are awarded additional points in the selection process.

Question: How many school districts have sought, and how many have been granted, waivers on the number of years they may receive bilingual education funds because they are experiencing substantial influxes of immigrant, refugee, or limited English proficient students?

Answer: Grants for transitional bilingual education, developmental bilingual education and special alternative instruction are limited by statute to three years with an opportunity to apply for a two-year renewal. There is no provision in the current statute that permits the Department to extend the grant period beyond five years.

EVALUATION ASSISTANCE CENTERS

Question: In your justifications you state that funding for the two evaluation assistance centers was increased in 1986 to meet an unanticipated increase in demand for services. Specifically, what types of services did this increased funding support?

Answer: The increased demand for technical assistance through the Evaluation Assistance Centers (EACs) is primarily the result of two factors. The first factor resulted from a legislative change in the requirements for the evaluation component of Title VII grants to local education agencies (LEAs). The regulations that follow this legislative mandate set forth rigorous and reasonably sophisticated guidelines for program evaluation. Many of the funded LEAs have limited in-house program evaluation skills and must rely on the EACs for technical assistance in evaluating their bilingual programs.

The second factor contributing to increased demand is the quality of services the EACs provide. Demand is always high for high quality assistance. The EAC contractors have implemented outreach, training, and technical assistance agendas that are responsive to local needs and sensitive to the skill level of the Title VII project staff. The EACs consistently have emphasized the fact that a good evaluation plan will meet Federal reporting requirements and provide data that help improve local programs for LEP children. Such evaluations are valued by LEAs.

Question: Does your FY 1988 budget request for the two evaluation assistance centers take into account these unanticipated service needs?

Answer: The EACs will be recompeted in the spring of 1988. The fiscal year 1988 budget request is for $700,000, which we estimate should be sufficient to meet the first year funding requirements for both new centers. However, the final budgets for each Center will be determined by the outcome of that competition.

RESEARCH

Question: In your justifications you indicate that a major evaluation of teacher training components will be funded in 1987. Can you describe for us the purposes of this proposed study and what types of information you anticipate the study will provide?

Answer: The planned study will update the 1981 evaluation of the Department's bilingual teacher training program. It will develop estimates of the number of students supported under the grants program who successfully complete their training and become

bilingual education teachers. Information on their tenure in the field also will be gathered as well as the reasons some may give for leaving the profession. Graduating a large number of students from sponsored programs may do little to reduce the potential teacher shortage if the attrition rate of trained teachers in the field is unacceptably high. Information of this kind may be used to improve selection and training of students so that, once on the job, they are more likely to make a long-term commitment to bilingual teaching.

The institutions of higher education that receive grants will be polled as will students currently in the training programs. Information on course content, its relationship to good pedagogical practice, and opinions on how the programs may be improved will be gathered. Exemplary training programs will be identified and described in order that criteria used for applicant selection may better focus on salient program characteristics; i.e., criteria that lead to the development and support of quality programs.

TEACHER SHORTAGE

Question: Mrs. Whitten, another reason cited for the high Hispanic dropout rate is the shortage of available Hispanic teachers. Does this explain why so many teachers' aides are used to provide bilingual education services?

Answer: The question seems to imply that only Hispanic teachers can provide an effective educational program for Hispanic students. I disagree with that premise. I believe that effective instruction can be provided by qualified teachers regardless of their ethnic background.

In some cases, the use of bilingual teacher aides may reflect the inability of a school district to find a teacher qualified to provide instruction to limited English proficient students. In other cases, teacher aides are used to support the instructional activities of a fully qualified teacher. The supplementary instruction provided by a teacher aide can make possible a greater degree of individualized instruction than would otherwise be possible. The "Descriptive Phase Report of the National Longitudinal Evaluation of the Effectiveness of Services for Language Minority, Limited English Proficient Children," estimated that in the 1983-84 school year there were 44,296 teachers in grades K-6 providing special instructional services to limited English proficient students and 26,474 teacher aides serving these students.

Question: Your budget materials mentioned a 1981 report that showed that only half of the participants in your teacher training program were going on to become bilingual education teachers. What has your office done since 1981 to improve this record?

Answer: Since the spring of 1985, when I became director of the office, we have taken several steps to increase the effectiveness of training programs under Part C of the Bilingual Education Act. Several provisions of the regulations published last year address this question. For example, applications for educational

personnel training grants must provide us with an evaluation plan that will produce data on placement of program graduates. The "need and impact" and the "program objectives and design" criteria in these regulations should also increase the effectiveness of these projects in placing graduates. This year we have initiated several major research studies to give us a current picture of the supply and demand for trained teachers and the effectiveness of our program in meeting this demand.

HISPANIC DROPOUT RATE

Question: Do you have some general thoughts on how we can approach the dropout problem?

Answer: I believe that maximum flexibility within schools is needed to combat our nation's dropout problem. This means we must return to the States and local school districts their right to choose the bilingual program which in their judgement will be most effective for their students. Unfortunately, the present Bilingual Education Act forces most schools receiving Federal funds to use one method of instruction -- transitional bilingual education. Added flexibility within programs will lead to increased student-teacher involvement which, in turn, can only serve to diminish the dropout problem.

Question: We have a growing number of Hispanic youth who are out of school but still lack the English skills they need. Has the family English literacy program been at all effective in reaching our Hispanic dropouts?

Answer: Family English literacy projects are designed to help limited English proficient adults and out-of-school youth achieve competence in the English language. Preference is given to programs serving parents of children enrolled in programs assisted under the Bilingual Education Act. Consequently, only a small percentage of participants are Hispanic dropouts in the usual sense -- i.e., they attended school in the continental U.S., but are not attending school now and are not high school graduates. However, in a broader sense, virtually all program parcipants are dropouts. Most, regardless of ethnic background, have not completed high school. This program is designed to break the intergenerational cycle of illiteracy. The Department believes that the education of parents will encourage their children to remain in school and complete their education.

Question: How many young people have we reached with this program?

Answer: The primary focus of the family English literacy program is serving parents. We do not have data on the number of young people served by this activity, but estimate that fewer than five percent of the approximately 4,000 particpants are Hispanic students who have dropped out of U.S. schools. The family English literacy program has established 20 projects in 13 States.

ESTIMATES OF TARGET POPULATION

Question: Mrs. Whitten, between 1985 and 1986 your office tightened considerably the definition of the students in need of bilingual education, and so, you reduce your estimate of the number of students needing services by half. This change has allowed you to claim that 94 percent of the students in need of services are receiving them. The Federal Government provides a very small fraction of that percentage. Have these estimates been updated since the 1980 Census?

Answer: The Department of Education estimates that in January, 1986, there were between 1.2 million and 1.7 million children, age 5-17, likely to benefit from services under the Bilingual Education Act. In endorsing this estimate, the Department has made the judgement that children scoring at or below the 20th percentile (of their native-English peers) are unlikely to benefit from standard instruction in English. The estimate also reflects the assumption that students most likely to benefit from services under the Bilingual Education Act are those that themselves make significant use of the native language. The larger estimates that the Department used in the past counted many students who lived in households where a language other than English was spoken, but who did not speak that language themselves. Other students included in this estimate spoke the native language sometimes, but usually spoke English. Furthermore, these prior estimates used the 43rd percentile rather than the 20th. By this standard, 43 percent of native English speaking students would also be classified as limited English proficient. The current estimate is based on data from the Census, but does assume significant growth since 1980.

Question: Since 1980 there has been an influx of immigrants in my own State of Florida and more new immigrants nationwide. Do you still believe that 94% of the students in need are receiving bilingual services?

Answer: The "Descriptive Phase Report of the National Longitudinal Evaluation of the Effectiveness of Services for Language Minority, Limited English Proficient Students" collected data from a nationally representative sample of school districts in the fall of 1983. Based on the data collected, the contractor estimated that there were 1.4 million limited English proficient students in the country, age 5-14 that had been identified by school districts. Of these, 94 percent were being provided with some kind of special instructional service designed to address their limited proficiency in English. In some cases the special instruction was an English as a second language program and in others it was transitional bilingual education. The contractor hypothesized that these data may understate the true number of students in need of services since some school districts may not wish to identify students that they are unable to serve. The Department has no more recent data on the percentage of limited English proficient children that are being provided with special instructional services, but has no reason to believe that the situation has changed dramatically.

IMMIGRANT AND REFUGEE EDUCATION

Question: Mrs. Whitten, your statement justifies the termination of the Immigrant and Refugee Education programs by claiming that the Chapter 1, Chapter 2, and Bilingual Education programs are sufficient to serve these children. We know that the affected school districts get far less from these programs than it actually costs to educate each child. We may argue about the numbers but we know that there are not enough funds to serve all the students that are currently eligible for Chapter 1 or Bilingual Education. The Chapter 2 funds are already being used to pay for purposes that the Administration supports. So aren't we just kidding ourselves when we say that these programs can absorb these additional students without taking services away from other kids or pushing additional costs on to the States?

Answer: In many cases these children already participate in programs under Chapters 1 and 2 of the Education Consolidation and Improvement Act and the Bilingual Education program. The Immigrant and Refugee Education programs constitute general aid to education to school districts with these children. Participating districts are not required to provide any specific educational services. During a period when Federal spending must be curtailed, we believe that available resources are better invested in programs designed to provide specific services rather than in general aid programs.

Question: Mrs. Whitten, in your statement you mention that over 50,000 students are counted simultaneously for both the Immigrant Education Program and the Refugee Education Program. Isn't it true that if a student is counted for both programs, their award is reduced so that they do not get two full awards?

Answer: School districts receive an average of $193 for each refugee student enrolled and $66 for each immigrant student. When refugee children are counted under both programs, districts receive an average of $234 for these students. Consequently, while immigrant education awards are reduced, they are reduced by only about $25 per refugee student.

VOCATIONAL AND ADULT EDUCATION

Questions Submitted by the Subcommittee

BASIC GRANTS

Question: Since the justifications indicate that it is "premature" to speak of accomplishments of the Basic Grants program, why do you want to terminate this program before obtaining information on its implementation?

Answer: The decision to phase out direct Department of Education support for vocational education was a difficult one. The task we faced in assembling the 1988 budget was to make the necessary savings while, at the same time, maintaining essential Federal programs and encouraging needed education reform. In making these difficult choices, priority was given to programs that enhance educational opportunities for the poor, the disadvantaged, the handicapped, and children of limited English-speaking ability; benefit children at the elementary and secondary levels; improve the quality of American education; and teach basic academic and literacy skills.

Quality vocational and job training programs are an important part of the Nation's system of education, and virtually every school district in the country offers vocational education opportunities for students. The Department's contribution is a tiny portion of the entire vocational education enterprise, and its elimination will not weaken vocational education. State and local governments spend about $12 for every Department of Education dollar spent on vocational education, and vocational education programs now receive substantial support from other Federal as well as non-Federal sources. For example, the Department of Education supports loans to students receiving vocational education at postsecondary institutions; the Department of Labor spends about $3.2 billion on job training programs; and corporations spend about $30 to $40 billion on training programs for their employees. Current budget circumstances, as well as the substantial dollars spent on vocational training from other sources, made it very difficult to justify our continuing to provide direct categorical funding in this area.

CARL D. PERKINS VOCATIONAL EDUCATION ACT

Question: What criticisms of Federal vocational education programs do you feel are still valid following the enactment of the Carl D. Perkins Vocational Education Act?

Answer: While the Perkins Act did make several improvements over the antecedent Vocational Education Act, it is nonetheless an extremely complex law to administer both at the Federal level and at the State and local levels. The Act mandates a plethora of categorical programs and special set-asides. While it has refined the Federal role to direct support for program expansion and improvement rather than to merely maintain existing programs, the proliferation of set-asides and other funding and matching requirements create a heavy administrative burden for State and local governments.

Results of the National Assessment of Vocational Education will be available in January 1989. Until these results are obtained, it is premature to list specific criticisms of the Perkins Act. When the National Assessment is complete, we hope to use that study, together with all other relevant research, to identify needed legislative modifications.

VOCATIONAL EDUCATION PROGRAMS FOR INDIANS

Question: With respect to the funds reserved for vocational education programs for Indians under Basic Grants, what percent of applicants for awards were funded under the national competition?

Answer: There were 75 new applicants for the fiscal year 1986 funds reserved for Indian Tribes and Tribal Associations. Twenty-two new awards were made, funding 29 percent of the applicants. In addition, 12 continuation grants were made to ongoing projects.

Question: How many students did these programs serve?

Answer: Fiscal Year 1986 funds are supporting 41 tribal projects that expect to serve 2,600 participants.

Question: How many Indian students are served under other Basic Grants programs, and at what funding level?

Answer: The States are not required to report the number of Indian students served through their Vocational Education Basic State grants. However, using Census data on Native Americans as a percentage of the total population, we estimate that Basic State grants served approximately 81,000 Indian students in 1986 with $4.7 million.

Question: How do vocational education services differ under the two types of programs?

Answer: The Perkins Act authorizes essentially identical services under its Basic Grants programs and its special programs for Indians. However, grants under the Indian program are made to tribal organizations which provide services to students living on reservations and in isolated areas, students who are typically not well served by the public school systems. More special services are generally made available to students through the Indians program, because of the special needs of Native Americans.

As a group, Native Americans have a high unemployment rate and a low level of educational attainment. Many Native Americans live in remote areas with inadequate (or absent) vocational education facilities and limited job opportunities. The Indian vocational education program is a discretionary program designed to meet the special needs of this population. The program provides funding for a variety of special services, including:

- Student stipends to permit persons to participate in training. Many Indian students receive minimal financial support for child care and living expenses to permit them to pursue vocational education.

- Remodeling of available (tribal) space and purchase or lease of equipment.

- Basic, remedial, and prevocational instruction to compensate for profound educational deficiencies.

- Counseling, support services, and placement specialists required because of student characteristics and isolation. For example, employment service offices are usually located some distance from tribal programs.

- Training in non-traditional occupations including salmon fishing, blueberry production, arid range management, and tribal management, which are not typically offered in regular vocational programs.

Furthermore, the Indian vocational education program requires that each program must be linked to a tribal economic development program, and each must guarantee placement of at least 65 percent of its program completers. Actual placement figures now exceed 75 percent, and many projects report placement rates of 95-100 percent.

COMMUNITY-BASED ORGANIZATIONS

Question: What information do you have concerning the first year of implementation of vocational education grants for the Community-Based Organizations Program?

Answer: Very little is known yet about the specific projects that the States are funding with this money, since most of these projects are just getting underway. Reports on the first full year of program implementation are not due from the States until December 1987.

The $6 million appropriation for the activity provided very small allocations to most States. Some States have chosen to use this allocation to fund only one or two projects. As results of these initial projects become available, we will be able to share with the States information about successful approaches to funding CBO projects.

Question: Since funds were distributed more than half a year ago, do you have any reports from the States concerning the kinds of programs or the types of participants that these grants are being used for?

Answer: The only information currently available comes from approved State plans and from informal contacts with State administrators. These sources indicate that many States may be using these funds for "alternative" programs, primarily for inner-city youth who have been difficult to reach through more traditional programs.

Question: What additional vocational education services are authorized for community-based organizations that are not authorized under Basic Grants to the States?

Answer: There are no services authorized under the Community-Based Organizations section of the Perkins Act that could not be provided under the Basic Grants authority.

IMPROVEMENTS IN VOCATIONAL EDUCATION

Question: To what extent have the closer ties between State Councils and private industry resulted in improvements in vocational education programs?

Answer: The Perkins Act requires that five council members shall be representatives of business, industry, and agriculture, including one who also serves as a private sector member of the State job training coordinating council (established under the Job Training Partnership Act). A recent survey by the National Center for Research in Vocational Education found that many educators believe that having a common council member on JTPA and vocational education councils leads to increased coordination.

Reports from State Councils on Vocational Education covering the last year of the old Vocational Education Act and the first year of the Perkins Act were due March 31. These reports are being analyzed and summarized; a summary report will be available in two months. Reports from several States suggest that there is increased coordination with industry. In Illinois, for example, the Council proposed a Vocational Instructor Practicum program in which educators participate in industry internships to update skills for the classroom.

Question: Do you feel that these improvements have not been sufficient to continue Federal funding either for the State Councils or for vocational education programs in general?

Answer: Our recommendation to terminate Federal funding of vocational education (including State councils) was based on budget rather than programmatic concerns. The vocational education program has tremendous non-Federal support -- 12 non-Federal dollars are spent for every Federal dollar -- and will continue to succeed without Federal funding.

NATIONAL ASSESSMENT OF VOCATIONAL EDUCATION

Question: What is the status of the National Assessment of Vocational Education that is authorized under National Programs?

Answer: The Department has assembled a staff directed by Mr. John Wirt in the Office of Planning, Budget, and Evaluation to conduct the National Assessment of Vocational Education. As a first step, the study team sponsored a Design Conference on September 12-13, 1986, to identify issues for the assessment. On January 15, 1987, the Study Plan was presented to congressional staff. Copies of the plan are available and have been distributed to all congressional staff who attended the meeting.

The study plan organizes the National Assessment's mandate around five broad areas:

- o Implementation of the Perkins Act;
- o Access of Special Populations to Vocational Education;
- o Conditions of Secondary Vocational Education;
- o Conditions of Postsecondary Vocational Education; and
- o Changing Economy and Its Skill Requirements.

Implementation of the Study Plan is proceeding on schedule. One contract for a technical support center has been awarded and others are in various stages of the procurement process. The study team has given several briefings and presentations to the vocational education community and other groups.

Question: How will the Assessment determine the success of the Perkins Act in modernizing the Nation's vocational education system?

Answer: The research will describe changes that have occurred in capacity to provide vocational education since the passage of the Perkins Act and over longer periods of time in a carefully selected sample of local communities. These case studies will describe changes in existing programs as well as new initiatives. The case studies will be supplemented with information from questionnaire surveys at the State and local levels to quantify how funds from the Perkins Act have been used for purposes of program improvement. The sample of districts included will be large enough to draw important conclusions on a nationwide basis. The case studies will represent both the secondary and postsecondary levels and all types of vocational-technical programs and institutions.

Question: What is the funding level of the Assessment in the current year, and where have these funds come from?

Answer: The total funds to be obligated by the National Assessment for fiscal year 1987 will be $2,258,820. The sources of these funds are:

Appropriation	Amount
Perkins Act FY 1986-Part IV	$928,041
Recovery Funds (Vocational Education Act)	677,179
Perkins Act FY 1987-Bilingual Vocational	368,600
Women's Educational Equity Act	125,000
ECIA-Chapter 1 Evaluation	350,000
	2,448,820

BILINGUAL VOCATIONAL TRAINING

Question: If Bilingual Vocational Training programs reach only a small portion of the eligible population, why would that justify the termination of these programs?

Answer: The Bilingual Vocational Training programs substantially duplicate services provided to the same population by other programs. In 1985, over 500,000 limited English proficient persons were served through the Adult Education Act (for which the Administration is requesting a 20 percent increase in funding). In

addition, limited English proficient youth and adults receive services under the Bilingual Education Act. In 1986, the Bilingual Vocational Education program served only 1,200 students nation-wide, at an average cost per student of nearly $2,000. We believe that this program is not an effective use of these funds.

Question: What efforts have you made to increase the participation of eligible persons?

Answer: Over the past few years we have actively promoted the dissemination of the bilingual vocational training program's (BVT) concepts, models, and designs so that a higher number of limited English proficient persons in need of services could be reached through a wider range of providers. Through contacts with the State directors of vocational education, some progress has been made towards institutionalizing BVT programs at the local level. More recently, we have contracted for regional workshops to teach community advocacy groups about BVT's goals, objectives, and methodologies and about how to obtain the resources needed to run a local project. We are also meeting directly with vocational educators from seven States, selected for their high actual numbers or percentages of limited English speakers, to assist them in replicating model programs.

Question: How many persons participate in Bilingual Vocational Training programs, and how does that number compare with the number of persons receiving bilingual training under Basic Grants to the States under the Perkins Act?

Answer: We estimate that in the 1986-87 school year 1,200 students are receiving vocational training in the BVT program. Another 100 persons have participated in the Bilingual Vocational Instructor Training (BVIT) program. Also, some 65-70 educators have attended special program improvement and expansion workshops.

Since the suspension of VEDS (vocational education data system) information collection over two years ago, we do not have current data for the number of limited English proficient persons served under the Basic Grants program.

Question: What percentage of persons eligible for bilingual services participate in each type of program?

Answer: Bilingual Vocational Training programs are available to serve limited English proficient persons who need training in occupational areas for which there is current or projected future demand. The 1980 Census data indicate that approximately 14.5 million people in the U.S. use a language other than English at home. Obviously, the 1,200 students served through the BVT program represent a very minute portion of this population. Since we have no current data on the number of limited English proficient (LEP) persons served through the Basic Grants program, we cannot estimate this group as a portion of the eligible population. In addition, such a comparison would be meaningless, since most of the LEP population do not fall into the target clientele of the BVT program.

ADULT EDUCATION

Question: How many adults are estimated by the States to need adult education services under Grants to States programs?

Answer: Persons who are at least sixteen years of age or who are beyond the age of compulsory school attendance and who have not obtained a certificate of graduation from secondary school or an equivalent level of education are eligible to participate in the Adult Education program. 1980 Census data shows that almost 52 million persons meet these criteria.

Question: How many adults are waiting to receive services but cannot because existing programs are already at full capacity?

Answer: The Department does not collect information on the number of adults who are waiting to receive instructional services. Some States report that in urban and metropolitan areas with large limited English proficient populations there are significant waiting lists.

Question: What progress has been made by the Secretary in collecting information on students, programs, expenditures, and goals of State adult education programs, as authorized by the 1984 Amendments to the Adult Education Act?

Answer: After the 1984 amendments authorizing data collection, a statistical performance report was developed and approved by the Office of Management and Budget. Fiscal year 1986 data received from the States are now being compiled and analyzed. While the approved form did not become effective until 1986, many States voluntarily submitted statistical information for 1985. Although this information is incomplete, selected data items for 1985 indicate:

Total participants	2,879,125
Level I (Grades 0-8 and ESL)	77%
Level II (Grades 9-12)	23%
Women	52%
Ages 16-24	40%
Ages 25-44	41%
Unemployed	47%
On public assistance	17%

State and local expenditures average nearly 68% of all program expenditures. However, the State of California's contribution represents over half of all State and local contributions.

VOCATIONAL EDUCATION DATA SYSTEM

Question: Last year, the Department stated that its redesigned vocational education data system will be able to collect valuable detailed information on students and programs. Will this system be eliminated if the Department's proposal is passed?

Answer: No. The new data system will be funded through the Department's Office of Educational Research and Improvement (OERI) rather than through the Vocational and Adult Education program budget. OERI, which has the lead role in determining the scope and structure of the new vocational education data system, recently presented the Department's proposed plan, Data on Vocational Education (DOVE), to representatives of congressional committees and offices. DOVE will provide:

- o Enrollment, completer, leaver, and participation data, by program;
- o Placement and follow-up data;
- o Sex and racial/ethnic data;
- o Handicapped, disadvantaged, and LEP data;
- o Staff data; and
- o Financial data.

Guided by the general policy of reducing Federal data-gathering burdens, the new system is quite different from the old Vocational Education Data System (VEDS). DOVE will use sampling and data from other programs such as the National Assessment of Education Progress, the Postsecondary Student Aid Survey, and longitudinal surveys. In some cases, of course, special questions may be incorporated in existing surveys to meet the special needs of DOVE.

Because the data will be largely extracted from existing data bases, the States will not be required to submit cumbersome reports of vocational education data.

THE NATIONAL ASSESSMENT OF VOCATIONAL EDUCATION

Question: Mr. Pucciano, please explain what progress has been made on the National Assessment of Vocational Education?

Answer: As discussed in response to a previous question, the Department has assembled a staff to conduct the Assessment and sponsored a Design Conference from which the framework of the Assessment and a study plan were developed. Implementation of the study plan is proceeding on schedule.

Question: What is your schedule for completing the assessment?

Answer: The final report will be presented to the Congress on January 1, 1989.

Question: Will the study be completed if your 1988 request is enacted?

Answer: Yes. So far, no funds have been appropriated specifically for the National Assessment of Vocational Education. Therefore, the Department has pulled together funding for NAVE from a variety of sources. If our 1988 request is enacted, we anticipate completion of the Assessment using sources of funds outside of the vocational education program.

Question: If not, what sources will be used to fund the assessment?

Answer: As previously discussed, the sources of funds to be used include Perkins Act fiscal year 1986 and fiscal year 1987 appropriations, Vocational Education Act recoveries, Women's Educational Equity Act appropriations, and ECIA Chapter 1 Evaluation funds.

VOCATIONAL EDUCATION CURRICULUM COORDINATION CENTERS

Question: Mr. Pucciano, a recent study showed that the Vocational Education Curriculum Coordination Centers have been a very cost effective way of providing curriculum assistance to vocational education programs. Why won't these centers be funded in 1987?

Answer: We agree with you that the Curriculum Coordination Centers are a very effective resource. The decision not to fund the Curriculum Coordination Centers was not made by the Department of Education, but came about through the Congressional appropriations process. In making fiscal year 1987 appropriations for vocational education programs authorized by the Carl D. Perkins Vocational Education Act, the Congress appropriated $11,000,000 for National Programs, which include vocational education research, demonstrations, and data systems. The authorizing statute requires that, of this amount, $3,500,000 must be used for the National Occupational Information Coordinating Committee (NOICC). In accordance with further provisions in the authorizing statute, the Department must also use $6,000,000 to fund the National Center for Research in Vocational Education. A further set-aside in the Perkins Act requires that the remaining $1,500,000 available for National Programs must be used for Demonstration Programs. As a result, no funds remain available to continue funding the six regional Curriculum Coordination Centers. The Department of Education notified the Congressional appropriations committees of this situation on two separate occasions in the summer of 1986, prior to final enactment of the appropriations act.

Question: Do you have any recommendations on how we can fund these centers in 1987?

Answer: We recommend that bill language be included in supplemental legislation to earmark funding for the centers out of the $11,000,000 already appropriated for fiscal year 1987 for national programs under Title IV of the Carl D. Perkins Vocational Education Act. The Department believes that $1,050,000 of these funds would be used more efficiently to continue funding the centers at their current level, and to help fund the National Assessment of Vocational Education, rather than to begin a totally new demonstration program, as is currently mandated.

Question: Would these Centers also close in 1988 if we enacted your request?

Answer: The 1987 supplemental bill language we recommend would fund the Centers through June of 1988. Our fiscal year 1988 request would provide no further funding for the Centers at that time.

VOCATIONAL AND ADULT EDUCATION -- LITERACY ACTIVITIES

Question: If the Department is committed to reducing illiteracy in America, why is it requesting the termination of the Basic Grants program, which was identified in a 1986 survey by your own Department as providing $147 million for literacy activities?

Answer: The Vocational Education Basic Grants program was identified in the Literacy Management Information Project as a program having only a secondary relationship to adult literacy. While some of the funds for this program may be used for basic skills development and literacy activities, the purpose of these grants is vocational education. The Adult Education program has a primary role in promoting adult literacy. The Department's commitment to adult literacy is confirmed by our request for a 20 percent increase in funding for this program.

Question: How are these services going to be replaced if the Basic Grants program is terminated?

Answer: As previously discussed, the Federal role in vocational education is quite limited compared to State and local involvement. State and local governments spend $12 for every Department of Education dollar spent for vocational education. We do not anticipate any disruption of vocational education opportunities, including those which incorporate basic skill development, with the enactment of our budget request.

DROPOUTS

Question: Mr. Pucciano, roughly 50 percent of Federal vocational education funds are limited to programs whose purpose is to assist special disadvantaged populations. Statistics show that the dropout rates among these disadvantaged groups far exceed the average. A recent study also shows that among disadvantaged students, those that participate in vocational education are less likely to drop out than those who do not.

Given the dropout problem we see in these populations, does it really make sense to walk away from the Federal commitment to these programs?

Answer: You do not identify the study to which you refer, but only one recent study supports this conclusion. A study conducted by the National Center for Research in Vocational Education (NCRVE), entitled "The Role of Vocational Education in Decreasing the Dropout Rate" (Weber, 1986), suggests that vocational education might serve in concert with other factors to help dropout-prone students complete their high school education. However, other studies cannot confirm any correlation between vocational education and high school retention. An analysis using High School and Beyond Data for the Center for Statistics, entitled "Who Drops Out of High School? Findings from High School and Beyond" (Barro and Kilstad, 1987), found no relationship between vocational education and high school retention when other factors were controlled.

We continue to believe that the best way to serve disadvantaged students is through the improvement and protection of basic educational opportunities in the elementary and secondary years.

COORDINATION BETWEEN VOCATIONAL EDUCATION AND JTPA, PRIVATE INDUSTRY COUNCILS

Question: Mr. Pucciano, the Carl Perkins Vocational Education Act requires that each State coordinate its plans for Vocational Education and JTPA programs so that there is no duplication of services and expenditures. Both programs are also supposed to be advised regularly by private industry representatives. I have heard mixed reports as to how well these groups coordinate at the local level.

What have been your observations and experience with these coordination efforts?

Answer: We believe that coordination between vocational education agencies and JTPA agencies, though far from flawless, is much improved under the current legislative authorities for both programs. The first annual report on JTPA-vocational education coordination by the National Center for Research in Vocational Education (NCRVE) generally supports our conclusion.

Based on descriptive data collected in 1986 from State administrators and council chairs of JTPA and vocational education systems, NCRVE found that "a substantial majority (over 70 percent) ... feel that coordination has improved since JTPA replaced CETA." NCRVE also found that a large proportion of JTPA clients, especially in rural areas and smaller cities, were served in public vocational education facilities and that all public school systems visited had some relationship with a JTPA program.

While the study found that the 8 percent JTPA set-aside for education coordination had not increased the institutional capacity of the two systems for working together, neither had this provision had any overall negative effect on coordination. Most noteworthy perhaps was the study's finding that other legal requirements, such as the use of a common occupational information system and dual representation on each of the two systems' advisory councils, did result in improved coordination.

Among more negative findings, NCRVE found a lack of joint planning, which might be attributed to the relative newness of the Perkins Act requirements.

Copies of the first annual report on JTPA-vocational education coordination have been forwarded recently to both Houses of Congress. An additional copy is being furnished to the Subcommittee under separate cover.

NO FEDERAL ROLE IN VOCATIONAL EDUCATION RESEARCH AND ASSESSMENT

Question: Mr. Pucciano, studies performed by your own Department have confirmed that the Federal efforts at research, data collection, and curriculum development have been very cost efficient and would be far more expensive if performed on a State-by-State basis. When you argue that the taxpayers can assume the cost of the

Federal efforts through their State taxes, aren't you failing to mention that they will be paying higher taxes as a result of your policy?

Answer: The individual States, and the taxpayers in those States, will have to make difficult choices about programs to be funded through State revenue. However, vocational education is already strongly supported in every State, and we do not anticipate reductions in educational opportunities available to students resulting from our proposal.

VOCATIONAL EDUCATION: STATES ASSUMING FEDERAL COSTS

Question: In your statement you argue that the issue before this Subcommittee is not who pays for vocational education because the taxpayers will foot the bill either through their State taxes or their Federal taxes.

What evidence do you have that State Governments will be in a position to assume all the Federal efforts in these areas?

Answer: We have reviewed the history of Federal versus non-Federal support for vocational education from the inception of the Smith-Hughes Act in 1917 through the 1985 school year. In the past 20 years the State and local share of all public expenditures on vocational education has increased dramatically, from 71 percent in 1966 to over 92 percent in 1985. Consistent with this increase is the trend of the last ten years, during which the State and local share of vocational education spending has consistently reached the 90 percent mark.

We are confident that, with only minor increases in some cases, State and local governments will be fully capable of sustaining adequate levels of services in vocational education without depending on Federal dollars.

Question: There are five or six States represented on this subcommittee with suffering farm economies or very high unemployment rates. These are the States that need vocational education the most. At the same time, their State budgets are in no position to pick up the costs of these programs. Did you look at the conditions in different States when you developed your plan to terminate funding for vocational education?

Answer: Our review of vocational education funding trends included analyses of vocational education spending by State and by the various sections in the Perkins Act. While we did find differences in spending among the States and among the sections of the Act, these were not sufficient cause for continued Federal support for vocational education in every State, in light of more critical needs. In our review, we found that all States, regardless of their ratio of non-Federal to Federal funds, had vocational education programs which, in terms of such important criteria as facilities, equipment, materials, instructors and curricula, were more firmly institutionalized than almost any other federally funded education programs.

MODERNIZATION OF VOCATIONAL EDUCATION PROGRAMS

Question: When Secretary Brock testified before this Committee he expressed concern that a number of vocational education programs were training students for jobs in the 1960's and not the 1990's. I and many of my colleagues have the same concern. That is why the new Carl Perkins Act requires that 43 percent of our basic grant, over $320 million, are set aside for program improvement and modernization. Do you really believe that our programs will be able to modernize at the same rate and address our new skill needs if we terminate the Federal funding for modernization?

Answer: High quality vocational education programs that teach job skills for the future are an essential part of our Nation's education system. They are also an extremely important component of each State's economic development efforts.

We believe that States have many incentives to continue their current efforts of program improvement and modernization, and that business and industry will cooperate and contribute to these efforts to train students for the future.

Questions Submitted by Senator Quentin N. Burdick

ELIMINATION OF RESEARCH ON VOCATIONAL EDUCATION

Question: In statements made by the Department of Education, it has been suggested that the budget incorporates a commitment to better research and statistics related to education. However, the elimination of research funds included in the Perkins Act severely limits the ability to study what works and what doesn't in vocational programs.

Would you please explain the research commitment to education in light of the entire elimination of research on vocational education?

Answer: The Department will continue with two major vocational education research, evaluation, and data collection efforts which are funded from sources other than the vocational education program. The National Assessment of Vocational Education (NAVE), will provide very extensive information about the implementation of the Perkins Act and the effectiveness of vocational education. A new data collection effort, Data on Vocational Education (DOVE), will provide information about vocational education through statistical samples and other Department data bases. Both of these efforts will provide useful national information about vocational education.

VOCATIONAL NEEDS FOR WOMEN

Question: Based on your budget recommendations, it appears that single parents, displaced homemakers, and other programs geared toward women will be among the hardest hit. Yet the major group entering the work force is women.

If a major goal is to achieve a highly competitive well educated work force why would funding, targeted to meet the vocational needs of many women, be cut?

Answer: Our proposal to eliminate direct Federal support of vocational education by the 1988-89 school year is not a reflection on the importance of vocational education. We have recommended taking this bold step because of the need to reduce the size of the Federal deficit and to protect other programs which are more heavily dependent on the Federal portion of their funding sources than vocational education is. We anticipate that women will continue to have vocational education opportunities available to them. Women attempting to enter the workforce, indeed all taxpayers, will be much better off when we make measureable progress towards reducing the Federal deficit.

Questions Submitted by Senator Lowell P. Weicker, Jr.

Question: One of the few bright spots in this budget--and they are few and far between--is the increase you are seeking for the Adult Education State Grant program. Your request of $128 million reflects a $22 million increase over last year. This is a good program, but woefully inadequate by itself to combat the serious nature of the adult illiteracy problem.

Your own Department estimates that between 17 and 21 million adults, age 20 and over, are illiterate. Some experts believe the number to be considerably higher.

Are you aware that most of the Department's other programs which provide literacy services would be eliminated in the President's FY 1988 budget? Let me cite some examples:

-- Literacy services under the vocational education program (-$147 million)

-- Literacy services in the public libraries program (-$7 million)

-- Library literacy initiative (-$5 million)

-- College work study literacy project (-$1 million)

In every case, the entire program would be eliminated. Suddenly your $22 million increase begins to look less and less convincing as an indication of the Administration's "strong commitment to the fight against adult illiteracy, even in a period of fiscal restraint."

Answer: Three of the programs you cite were identified in the Literacy Management Information Project (LMIP) as having only a secondary or indirect relationship to adult literacy. In most cases, project directors for these programs do not keep separate accounts for literacy development activities, so the funding levels identified in the survey are only rough estimates. Two of the programs cited by the LMIP as having a primary relationship to adult literacy, Adult Education, and Adult Indian Education, are fully funded in our budget request, with a 20 percent increase requested for Adult Education. While the Library Literacy program was also identified as having a primary relationship to adult literacy, the elimination of this small program is more than offset by the increase requested for Adult Education.

Question: We understand that in New York City alone, some 9,000 people are on a 15-month waiting list to get into literacy programs. Do you have any corresponding national statistics as to the number of individuals who are awaiting openings in literacy programs?

Answer: The Department does not collect data on the number of individuals waiti..g for openings in literacy programs. However, some States report that in urban and metropolitan areas with large limited English proficient populations there are significant waiting lists.

Question: What is your estimate as to the number of illiterate adults served by literacy programs from all sources?

Answer: The Department does not have any information on the total number of illiterate adults served from all sources. The Adult Education program currently serves approximately 1.8 million adults seeking basic education, including literacy.

Question: What is your estimate as to the number of illiterate adults served by literacy programs from Federal-State-local-private sources?

Answer: The Department does not collect these data.

SUBCOMMITTEE RECESS

Senator BURDICK. The subcommittee will stand at recess until 3:30 this afternoon, and then we will hear testimony on higher education.

[Whereupon, at 10:37 a.m., Thursday, April 23, the subcommittee was recessed, to reconvene at 3:30 p.m., the same day.]

(AFTERNOON SESSION, 3:40 P.M., THURSDAY, APRIL 23, 1987)

The subcommittee met at 3:40 p.m., in room S–126, the Capitol, Hon. Lawton Chiles (chairman) presiding.

Present: Senators Chiles, Harkin, Weicker, and Domenici.

DEPARTMENT OF EDUCATION

SPECIAL EDUCATION AND REHABILITATION

HIGHER EDUCATION

EDUCATION RESEARCH AND IMPROVEMENT

STATEMENT OF BRUCE M. CARNES, DEPUTY UNDER SECRETARY FOR PLANNING, BUDGET AND EVALUATION

ACCOMPANIED BY:

MADELEINE C. WILL, ASSISTANT SECRETARY FOR SPECIAL EDUCATION AND REHABILITATIVE SERVICES

C. RONALD KIMBERLING, ASSISTANT SECRETARY FOR POSTSECONDARY EDUCATION

CHESTER E. FINN, JR., ASSISTANT SECRETARY FOR EDUCATIONAL RESEARCH AND IMPROVEMENT

OPENING STATEMENT

Senator CHILES. This afternoon we will continue our Department of Education appropriations hearing, focusing on handicapped education and rehabilitation services.

The testimony also covers the special institutions, Howard University, and research and statistics. Some common themes link the programs. One is the commitment to protecting the disadvantaged, whether they are handicapped, minorities or low income.

Another theme is investment in the future of education, ranging from programs that collect and publicize information about educational attainment to projects that help support academic facilities and libraries.

The Department's position that the Federal Government has only limited responsibility for these programs is reflected all too clearly in the proposed reductions and terminations. I think it is safe to say the subcommittee has serious concerns about some of these proposals.

While we do not intend to fund any program without careful scrutiny, neither will we abandon effective programs that aid the disadvantaged or improve the educational system.

I am delighted that Senator Weicker can join us this afternoon. He has been a most determined and effective advocate for many of these

programs over the years, and we will certainly benefit from his insight and expertise. Senator, you can make an opening statement.

Senator WEICKER. I have no opening statement, Mr. Chairman.

Senator CHILES. Senator Domenici?

Senator DOMENICI. I have no opening statement, Mr. Chairman.

Senator CHILES. All right. We will now proceed with the testimony of Mr. Bruce Carnes, the Deputy Under Secretary for Planning, Budget and Evaluation.

Mr. Carnes, we are pleased to have you again with us this afternoon and your full statement will be included in the record.

Mr. CARNES. Thank you very much, Mr. Chairman. I am pleased to appear before you and this distinguished committee to discuss the budget proposals for the Department of Education for fiscal year 1988 in the areas of special education and rehabilitation, higher education, and education research and improvement. I will just briefly summarize my statement and I would appreciate your including it in the record in full.

The total amount we are requesting for these programs is $3.4 billion. Of this amount, almost $3 billion would support programs for the handicapped and disabled; $346 million would support higher education programs; and $70 million would be spent on research and statistical activity designed to improve the quality of education in the United States.

We have concentrated our resources on program areas that address critical national needs and that are consistent with an appropriate Federal role. We have given top priority to programs that enhance educational opportunities for the poor, the disadvantaged, and the handicapped.

We consider Federal involvement to be essential for programs for the handicapped and disabled. These programs, amounting to almost $3 billion in our fiscal year 1988 budget, will provide education services to about 4.4 million students, and rehabilitation services to about 925,000 adults.

EDUCATION FOR THE HANDICAPPED

Our fiscal year 1988 request would provide increases over fiscal year 1986 to offset increased costs in fiscal year 1987 and fiscal year 1988 in the Education for the Handicapped State Grants Program, and to maintain a Federal share of $300 for an additional 22,000 children in the Preschool Grants Program. The request maintains funding at the fiscal year 1987 appropriation for most of the 12 special purpose program funds.

REHABILITATION SERVICES AND HANDICAPPED RESEARCH

For rehabilitation services and handicapped research, our request would provide an increase over the fiscal year 1986 level for State grants to offset the effects of increased costs in fiscal year 1987 and fiscal year 1988. Funding is maintained at the fiscal year 1987 level for

the majority of the special purpose programs to enable us to continue our initiatives in such areas as supported employment.

SPECIAL INSTITUTIONS

For the three special institutions for the handicapped, the American Printing House for the Blind, the National Technical Institute for the Deaf, and Gallaudet University, we are seeking a total of $101.5 million, providing equal or increased fiscal year 1988 appropriations for each of these institutions above their fiscal year 1987 levels.

An increase of $10,000 over the fiscal year 1987 level is requested for the printing house to offset our request for the termination of an anachronistic and expensive-to-administer permanent appropriation of this amount. The requests for NTID and Gallaudet each include $1 million for endowment funds to provide matching grants for privately raised funds.

HIGHER EDUCATION

In the higher education area, funds are targeted on activities that assist developing postsecondary institutions serving large numbers of disadvantaged and minority students, and that provide support services for financially and educationally disadvantaged students.

We are requesting $50.7 million to further the President's commitment to historically black colleges and universities under title III of the Higher Education Act. Funds would be limited to these institutions to help them build endowments and strengthen programs. Only endowment grants and HBCU formula grants under part B would be funded.

We are requesting $5 million for the Minority Institutions' Science Improvement Program to support projects at postsecondary institutions with predominantly minority enrollments, in order to enhance their capacity to develop and maintain quality science education programs and to promote opportunities for minorities in the fields of science and engineering.

HOWARD UNIVERSITY

In addition $170.2 million is required for Howard University, the same level as the fiscal year 1987 appropriation. Our long-term strategy is to reduce that institution's dependence upon Federal support by building up the university's endowment.

The Federal Government has an important leadership role in improving educational quality. To support this key role in higher education, we are requesting $7.5 million for the fund for the improvement of postsecondary education. Funds support exemplary locally developed improvement projects that have potential for addressing widely perceived problems and improving higher education quality.

EDUCATIONAL RESEARCH AND STATISTICS

The Department contributes significantly to the improvement of the quality of American education by providing accurate, timely, and reliable information to enable parents, boards of education, State legislatures, and the American public to continue the education reform movement. This is the original, basic, and essential function of Federal educational activity.

We are requesting $70 million, an increase of $7 million over fiscal year 1987, for the Department's education research and statistics activity. The paucity of funds for this activity seriously hampers Federal, State, and local educational efforts.

Funds would support data collection, research, and dissemination of information about the condition of education, successful programs and practices, trends and issues, and ways that greater knowledge of education processes may yield improved educational performance. Virtually the entire $7 million increase for this activity would be for the Center for Education Statistics.

VOUCHERS

Finally, Mr. Chairman, I would like to return if I could very briefly to a point which emerged in this morning's hearing concerning the support that the Department provides, or has provided in the past, in the area of vouchers.

I was asked whether we had provided any funds under chapter 1 to support the promotion of the voucher concept. At that time I answered that we did not. Subsequently congressional staff have consulted with us and indicated that they would like information about any support related to vouchers that we have given in any area of the Department since 1985.

In 1987 we provided no dollars for the support of any voucher study. In 1986 we provided no funding for that activity. In 1985 through the chapter 2 Secretary's discretionary fund, we supported three grants at a total of about $225,000 to support the study of vouchers as a choice option.

We do not regard this as the promotion of a voucher concept. We do, however, consider it the promotion of the free exchange of ideas.

PREPARED STATEMENTS

With that, Mr. Chairman, I conclude my statement and I will be happy to respond to your further questions.

[The statements follow:]

Statement of Bruce M. Carnes

I am pleased to appear before you to discuss the 1988 budget proposals for Department of Education programs in the areas of special education and rehabilitation, higher education, and education research and improvement.

The total amount requested for these programs is $3.4 billion. Of this amount, almost $3 billion would support programs for the handicapped and disabled; $346.3 million would support higher education programs, including operating support of Howard University; and $70.2 million would be spent on research and statistical activities designed to improve the quality of education in the United States.

For FY 1988, we have concentrated our resources on program areas that address critical national needs and that are consistent with an appropriate Federal role. We have given top priority to programs that enhance education opportunities for the poor, the disadvantaged, and the handicapped.

We consider Federal involvement to be essential for programs for the handicapped and disabled. These programs, amounting to almost $3 billion in our FY 1988 budget, will provide education services to about 4.4 million students and rehabilitation services to about 925,000 adults. The Department is committed to continuing support for these programs; however, we cannot support the huge and unwarranted increases enacted in FY 1987 for special education and rehabilitation programs, amounting to $498.7 million, or 18 percent over the 1986 level for existing programs. This is $344 million more than is needed to cover increased costs in these programs. Our 1988 request would provide increases over the 1987 revised level to offset inflation in the Education for the Handicapped State Grants program and to maintain a Federal share of $300 for an additional 22,000 children in the Preschool Grants program. The request maintains funding at the 1987 appropriation or revised request level for 10 of the 12 Special Purpose Funds programs. For Rehabilitation Services and Handicapped Research, our request would provide an increase over the 1987 revised level for State Grants to offset the effects of inflation. Funding is maintained at the 1987 appropriation level for the majority of the Special Purpose programs to enable us to continue our initiatives in such areas as supported employment.

For the three Special Institutions for the Handicapped--the American Printing House for the Blind, the National Technical Institute for the Deaf, and Gallaudet University--we are seeking a total of $101.5 million, providing equal or increased 1988 appropriations for each of these institutions over their 1987 levels. An increase of $10,000 over the fiscal year 1987 level is requested for the Printing House to offset our request for the termination of an anachronistic and expensive-to-administer permanent appropriation of this amount. The requests for NTID and Gallaudet University each include $1 million for endowment funds to provide matching grants for privately raised funds. We place a high Federal priority on maintaining these institutions' capacity to serve disabled persons and believe it is is important to help promote their financial independence by encouraging private support.

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In the higher education area, we are emphasizing programs that enhance postsecondary education opportunities for disadvantaged individuals. Funds are targeted on activities that assist developing postsecondary institutions serving large numbers of disadvantaged and minority students, and that provide support services for financially and educationally disadvantaged students. We are requesting $50.7 million to further the President's commitment to historically Black colleges and universities under Title III of the Higher Education Act. Funds would be limited to these institutions to help them build endowments and strengthen programs. Only endowment grants and HBCU formula grants under Part B would be funded. In connection with this, we are seeking legislative changes that would base these institutional grants on objective measures of financial need and would focus funding on activities designed to improve institutional management and promote long-term financial independence.

The Administration's commitment to supporting institutions that enroll large numbers of minority students is also reflected in our $5 million request for the Minority Institutions Science Improvement Program. Funds would support projects at postsecondary institutions with predominantly minority enrollments in order to enhance their capacity to develop and maintain quality science education programs and to promote opportunities for minorities in the fields of science and engineering. In addition, $170.2 million is requested for support of Howard University, the same level as the 1987 appropriation. Our long-term strategy is to reduce that institution's dependence on Federal support by building up the University's endowment. Level funding will provide financial security while the University develops means to increase its self-sufficiency.

The Federal Government has an appropriate leadership role in improving educational quality. To support this key role in higher education, we are requesting $7.5 million for the Fund for the Improvement of Postsecondary Education, the same as our revised 1987 level. Funds support exemplary, locally developed improvement projects that have potential for addressing widely perceived problems and improving higher education quality.

The Department also contributes significantly to the improvement of the quality of American education by providing accurate, timely, and reliable information to help parents, education school boards, State legislatures, and the American public continue the education reform movement. We are requesting $70 million, an increase of $7 million over 1987, for the Department's education research and statistics activity. Funds support data collection, research, and dissemination of information about the condition of education; successful programs and practices; trends and issues; and ways that greater knowledge of education processes may yield improved educational performance. Virtually the entire $7 million increase for this activity would be for the Center for Statistics, for which we are requesting $21.6 million. Funds would expand and upgrade our data-gathering, analysis, and reporting activities. The Department's work in this area is fundamental to our mission of providing an accurate picture of the condition of America's schools and colleges. The increase requested would improve our data on elementary and secondary schools, administrators, and teachers; support studies of student achievement and progress; and expand our knowledge of postsecondary education.

We are seeking $21.5 million for the Office of Research. Funds would be used to continue support for national university-based research centers, which are designed to seek solutions to pressing education problems through disciplined inquiry into such fields as reading, writing, teacher education, and effective schools. New research activities would include studies and analyses of school leadership; teaching and learning of subject-matter knowledge in key curriculum fields; State and local education reform initiatives; and college curriculum and careers.

Our request also includes $19.6 million for Programs for the Improvement of Practice, which would continue the regional laboratories aimed at school improvement, and $7.5 million for Information Services, which would continue ERIC, a major computerized bibliographic retrieval system.

We are proposing to terminate all Federal support for categorical library programs. Although we believe strongly in the value of libraries for the Nation, these Federal programs have fulfilled their original purposes. The Nation now has an extensive public library system, providing nearly all citizens with convenient access to one or more public libraries. In addition, there is no longer a critical shortage of professional librarians, nor is there a lack of library linkages and sharing. These activities can and will continue without Federal support. In fact, current Federal funding represents only about 4 percent of the Nation's library spending from all sources. Federal library programs have achieved their objectives and should be terminated.

I have briefly discussed the highlights of the budget proposals you have before you this afternoon. We would like to insert for the record more detailed statements by my colleagues who administer these programs. We would be happy to answer any questions you may have.

Statement of Madeline C. Will

Education for the Handicapped

Mr. Chairman and Members of the Committee:

We appreciate the opportunity to present the 1988 and 1987 revised budget requests for Education for the Handicapped. Our requests reflect the Department's continued priority on the education of handicapped children.

The 1988 request of $1.49 billion includes almost $1.35 billion for State Grants to provide financial assistance to States in educating the handicapped children for whom they are responsible under the Education of the Handicapped Act, and $143 million for Special Purpose Funds that support a wide variety of Federal grant and contract activities directed at improving the education of handicapped children.

The 1988 request for State Grants increases funds for both the Grants to States and the Preschool Grant programs. No funds are requested for the Grants for Infants and Families program.

The request maintains funding at the 1987 appropriation or revised request level for 10 Special Purpose Funds programs. Reductions in funding are proposed for Deaf-Blind Projects and Special Education Personnel Development.

The 1987 revised request of $1.45 billion includes an increase of $54 million over the 1986 level for Grants to States and an increase of $50 million over the 1986 level for Preschool Grants. A rescission of $121 million is proposed for Grants to States and a rescission of $101 million is proposed for Preschool Grants. A full rescission of $50 million is also proposed for Grants for Infants and Families, the new State Grants program authorized by the 1986 Amendments to the Education of the Handicapped Act.

The 1987 revised request for Special Purpose Funds proposes funding 9 of the 12 Special Purpose programs at the 1987 appropriation level. We are proposing rescissions of $3 million for Deaf-Blind Projects, $6.9 million for Early Childhood Education, and $6.5 million for Special Education Personnel Development.

These proposed levels will allow us to continue support for the needs addressed by these programs, while also addressing the need to control the deficit.

State grants

Our 1988 request for the State Grants program is almost $1.35 billion, an increase of $49.2 million over the 1987 revised request of $1.30 billion. The 1987 revised request represents an increase of $103.7 million over the 1986 level. Increases in funding are proposed for both the Grants to States and the Preschool Grants programs. No funding is proposed for the Grants for Infants and Families program.

Grants to States

We are requesting $1.22 billion for the Grants to States program in 1987 and $1.26 billion in 1988 to assist States in serving approximately 4.1 million handicapped children. The 1987 appropriation increase of 15 percent over 1986 is too high. The 1987 revised request provides an increase over 1986 to offset the effect of inflation, but proposes a rescission of the 1987 appropriation in excess of that inflation offset ($121 million). These requests would provide an average Federal share of $295 in 1987 and $306 in 1988 for each child served. The requests maintain the Federal share of the excess cost of educating handicapped children at the 1986 level of 7 percent by providing increases to offset the costs of inflation.

Preschool grants

We are requesting $78.9 million for 1987, an increase of $50.2 million over 1986, and $85.5 million for 1988, an increase of almost $7 million over 1987. Our requests increase the average Federal share for each 3 through 5 year old child served from $110 to $300. We believe this substantial increase will provide a strong incentive for States to expand services to these children.

We estimate that the number of 3 through 5 year olds served will increase by 2,000 in 1987 and by 22,000 in 1988. Our requests do not allow special one-time bonus payments of up to $3,800 per child based on State estimates of additional children to be served. Our 1987 revised request reflects a proposed rescission of $101.1 million. There is no evidence that higher payments are necessary to encourage States and localities to serve more 3 through 5 year olds, nor is the award level of $3,800 for each estimated child appropriate given the substantial increase in the level of support for this population.

Grants for infants and families

We are proposing a full rescission for the Grants for Infants and Families program and are not requesting any funds for this program in 1988. We have two major concerns about this new program. First, given limited Federal resources, we question whether it would not be better to focus this new program upon those most in need, such as the poor and the severely handicapped. Unlike other Education of the Handicapped programs, it appears that this program may provide primarily health and social services to handicapped and developmentally-delayed children from birth through age 2. In general, the Federal Government assists States in providing such services on the basis of low family income. Second, a number of programs already exist that provide funding for services to these children and their families. These include Medicaid and other programs administered by the Department of Health and Human Services at the Federal level, as well as State, local, and private programs, including private health insurance. In an area as new and complex as the provision of early intervention services to handicapped children from birth through age two, before funding a new program, we must ensure that available Federal resources are used in the most effective way.

Special purpose funds

Our 1988 request for Special Purpose Funds is $143.3 million, compared with a 1987 revised request of $157.5 million. For 1988, 10 of the 12 Special Purpose Funds programs would be maintained at the 1987 appropriation or revised request level. Deaf-Blind Projects and Special Education Personnel Development are proposed for reductions. The 1987 revised request maintains 9 programs at the 1987 appropriation level while proposing partial rescissions for Deaf-Blind Projects, Early Childhood Education, and Special Education Personnel Development.

Deaf-blind projects

The 1988 proposed level of $9 million for Deaf-Blind Projects is $3 million less than the 1987 revised request and $6 million less than the 1987 appropriation level. In accordance with the 1983 Amendments to the Education of the Handicapped Act, the program has shifted away from direct services toward providing technical assistance to States and service providers. Funding for direct services has been declining since 1983 as States assume a greater role in serving children for whom they are responsible. Currently, fewer than 500 deaf-blind children are not already provided a free appropriate public education by States under the Education of the Handicapped Act. In recent years, to use up

appropriated funds, increases have been made for demonstration projects aimed at improving educational programs for deaf-blind children. However, the number of demonstration projects now far exceeds the level necessary to address adequately program improvement for this small population. The requests reflect the declining need for direct service support and funding of demonstration projects at a level more appropriate for the number of children, about 5,000, who are the potential direct beneficiaries of these projects.

Early childhood education

For the Early Childhood Education program, $17.6 million is requested in 1988, maintaining the level of funding at the revised fiscal year 1987 level. The proposed rescission of $7 million for Early Childhood Education in 1987 is based upon changes made by the Education of the Handicapped Act Amendments of 1986, which eliminated authority for grants to States for planning, developing, and implementing services for children birth through 5 years of age. Since this authority no longer exists, no funds are requested for it. Previously 30 percent of the funds in this activity were required to be used for this purpose.

Special education personnel development

We propose funding the Special Education Personnel Development program at $50 million in 1988. This is a decrease of $11.2 million from the 1987 revised request. The revised request of $61.2 million reflects a rescission of $6.5 million back to the 1986 funding level. We are proposing these reductions in funding because of inadequate evidence linking changes in the quality and quantity of persons trained to the funding of this program, and because of the availability of other funds for similar purposes.

Severely handicapped projects

The 1988 request for Severely Handicapped Projects is $5.3 million, the same as the 1987 appropriation. These projects support demonstration, research, and training activities aimed at improving educational programs for severely handicapped children and youth. Grants are awarded in areas such as least restrictive environment, inservice training, and services to the most severely handicapped children.

Secondary and transitional services

For Secondary and Transitional Services $7.3 million is requested for 1988. This is the same amount as the 1987 appropriation. These funds will allow us to continue our efforts in improving the ability of older handicapped children to attain the skills necessary to live in the world of adults. Funds will support research and demonstration projects, including models that encourage cooperative planning by public agencies at State and local levels, job-related models, and research on social skills. In addition, two long-term projects studying intervention effectiveness and demographics will be continued.

Postsecondary programs

The 1988 request for Postsecondary Programs is $5.9 million, the same as the 1987 appropriation. Of this amount, $2 million will be used for the continued support of four institutions serving deaf students. Remaining funds will support new and continuing demonstration projects aimed at improving programs for postsecondary aged handicapped students.

Innovation and development

For the Innovation and Development program, we are requesting $18 million, the same as the 1987 appropriation. Funding priorities will include developing and improving intervention strategies for seriously emotionally disturbed children and youth, implementing research findings, and examining ways of better serving handicapped children in regular classroom settings. Field initiated and student research projects will also continue to be supported in 1988.

Media and captioning services

The request of $13.8 million for Media and Captioning Services is the same as the 1987 appropriation. The majority of funds in this program will be used to support captioning activities, including educational and general interest films, television news, and general programming.

Special education technology

The request includes $4.7 million for Special Education Technology, the same amount as the 1987 appropriation. These funds will be used for awards for developing instructional tools to promote the integration of handicapped children in regular classroom settings, operating a center for exchange of information on technology, improving educational software, and using technology to meet the needs of low incidence handicapped populations.

Special studies

We propose to maintain the Special Studies program at $3.8 million, the same amount as the 1987 appropriation. The majority of this request would be used for new studies, including awards to State agencies for cooperative evaluation studies. We will continue support for a longitudinal study of children leaving special education, which was mandated by the Education of the Handicapped Act Amendments of 1983.

Recruitment and information clearinghouses

Recruitment and Information Clearinghouses would be continued at $1.2 million in 1988, the same as the 1987 appropriation level. This program supports three national clearinghouses required under the Education of the Handicapped Act that disseminate information concerning special education programs, promote careers in special education, and disseminate information on postsecondary services for the handicapped.

Regional resource centers

Finally, we are proposing to maintain the Regional Resource Centers program at the 1987 appropriation level of $6.7 million. The objectives of these centers will continue to be the provision of technical assistance to States for capacity building, educational programming, and special education administration.

Thank you, Mr. Chairman and Members. I will be pleased to answer any questions you may have.

Rehabilitation Services and Handicapped Research

I appreciate this opportunity to discuss the fiscal year 1987 budget request for the Rehabilitation Services and Handicapped Research Account, which includes activities of the Rehabilitation Services Administration and the National Institute of Handicapped Research.

The total requested for this account is $1.2 billion, a reduction of $8.8 million from the 1986 revised request level. This 1986 level is essentially level funding from 1985. Our 1987 budget proposal is to continue out programs at--or slightly above--the 1986 revised level to help control the Federal deficit. Our proposal includes targeted reductions in Independent Living, Training, and Recreation.

Vocational Rehabilitation State Grants

Our 1987 budget request for Vocational Rehabilitation State Grants is $1.1 billion, the same as the 1985 appropriation and the 1986 revised request level. This level will enable States to maintain their ongoing programs of rehabilitation services to handicapped persons and to continue giving priority to severely disabled individuals. The number of persons served will depend in part on how many new applicants are accepted into the system in 1986 and on the amount of funding provided by the States, but we expect about the same number to be served in both 1986 and 1987 as were served in 1985. We have a contractor looking at caseload trends now to help us determine what, in addition to Federal funding, influences the size of caseloads. However, it is important to note that the number of persons served is not the only important impact measure. Other important measures include the quality of outcomes achieved and the severity of the disabilities of the persons assisted. We know that States continue to serve an increasing proportion of severely disabled persons, and we continue to emphasize placements in competitive employment.

Client Assistance

We are requesting $6.3 million for the Client Assistance program, which is the same as the 1985 appropriation and the 1986 revised request level. These funds will enable States to continue the client assistance activities mandated by the Rehabilitation Act. A congressionally mandated evaluation of the Client Assistance program is in progress. The results of the evaluation will be available by June 30, 1986.

Innovation and Expansion

For Innovation and Expansion Grants, we are requesting $9 million. Funding for this program was resumed in 1986 for two specific purposes. One is to help States develop or expand programs to assist disabled youth make the transition from school to employment. The other is to help develop programs that will provide supported employment for severely disabled persons. The funds requested for 1987 will enable the States to continue the projects they will be initiating in 1986.

Service and Demonstration Projects

We are requesting $29.3 million for Service and Demonstration Projects. Projects with Industry, Migratory Worker Projects, and Service Grants to Indian Tribes are proposed for continuation at the 1986 revised request level. A congressionally mandated evaluation of Projects with Industry has been completed, and a report on the findings was forwarded to Congress on February 20, 1986. An increase of $806,000 is proposed to return the Special Demonstration Programs for the Severely Disabled to the 1985 level of $14.6 million. This level will provide for continued funding of the supported employment projects that were initiated in 1985, the current network of spinal cord injury systems, and other demonstrations related to specific severe disabilities. We will also have funds for new demonstrations. No funds are requested for Special Recreation Programs. This is an activity more appropriate for private charities, local organizations, and corporations to finance.

Independent Living

Our 1987 budget request for Independent Living is $22 million for support of Centers for Independent Living. This is the level of funding that was available for the Centers in 1985 and 1986. We are not requesting funds for Comprehensive Services for Independent Living or for Independent Living Services for Older Blind Individuals. The independent living programs are overlapping and duplicative in many ways. Support for more than one program cannot be justified. Independent living services will continue to be provided to severely handicapped persons, including older blind persons, through Centers for Independent Living. Centers have already demonstrated their capacity to provide services to persons who are severely disabled. A report on the congressionally mandated evaluation of the Centers for Independent Living program will be submitted to Congress very soon.

Training

We are requesting $15 million for Training. This is the level necessary to cover continuation costs in all training categories and to continue the current network of continuing education, State inservice, and interpreter training programs. We have inadequate evidence of personnel shortages to direct any additional funds toward alleviating particular shortages, but we are continuing our efforts to collect better data on shortages and on the effects of Federal training assistance.

National Institute of Handicapped Research

Our request for the National Institute of Handicapped Research is $39 million, essentially the same as the 1985 appropriation and the 1986 revised request level. This funding level will provide for all continuation activities as well as for new awards under several of the Institute's programs. The 1987 budget strategy is to make new awards in field-initiated and priority directed research. We will not make additional, major long-term commitments, thus ensuring that funds in future years will be available to address new research priorities.

Helen Keller National Center

We are proposing $4.2 million for the Helen Keller National Center. This is the same as the 1985 level and slightly above the 1986 postsequestration level. The funding requested will allow the Center to maintain the level and nature of services provided in 1986 to its deaf-blinded clients.

Evaluation

Our request for Evaluation is $600,000. The funds requested will allow us to pursue a major new study on the impact of the Vocational Rehabilitation program. We need time to complete work already begun and to assess the need for new studies before we can use additional funds. Between 1984 and 1986, we have undertaken evaluations of nearly every program under the Act.

Fiscal Year 1986 Proposed Recission

For fiscal year 1986, we are proposing a recission of $75.4 million below the 1986 level following sequestration. These reductions will return most rehabilitation programs to the 1985 appropriated level. This level will allow us to maintain about the same level of services provided in 1985. A few programs will be reduced below the 1985 level to eliminate activities which are duplicative or inappropriate for the Federal Government.

STATEMENT OF C. RONALD KIMBERLING

Higher Education

Thank you for the opportunity to present the fiscal year 1988 budget request for the Higher Education account which totals $176.1 million. This amount is $100 million less than our revised 1987 request of $276.1 million.

The emphasis of our request is on the Federal commitment to addressing the postsecondary educational aspirations of poor and disadvantaged individuals. To meet this commitment, we propose to focus the limited Federal resources on programs which assist in equalizing educational opportunities for these disadvantaged individuals. In addition, we propose a modest amount of funds to stimulate excellence and quality in postsecondary education.

The Higher Education account has historically funded a number of small programs. For the past several years, we have requested no new

funding for nearly all of these authorities. Some of these programs have outlived their original purpose. Others have met their objectives of demonstrating the effectiveness of a particular educational approach. Still others have goals which can be better met by the private sector. At a time when we are all concerned about the Federal budget deficit, it seems even more appropriate to eliminate these programs.

Aid for Institutions

Our 1988 request includes $50.7 million for Title III of the Higher Education Act, which authorizes aid for institutional development. These programs help institutions which enroll substantial numbers of disadvantaged individuals. The funds appropriated for these programs are used by participating institutions to solve problems that threaten their ability to survive, stabilize their management and fiscal operations, and build endowments.

From its inception, Title III has played a key role in assisting the Nation's historically Black colleges and universities (HBCUs). These institutions were the primary source of postsecondary education for Blacks prior to the Supreme Court's desegregation rulings, and they continue to play a key role in enhancing educational opportunity and access for the disadvantaged. Because of student preference, location, low tuition, and institutional mission, HBCUs continue to enroll a large number of Blacks, other minorities, and low-income students.

In recognition of the critical role which these institutions play in our Nation's system of higher education, we propose to restrict participation in Title III programs to HBCUs. Under our request these vital institutions would receive $50.7 million in fiscal year 1988. Of this total, $40.7 million would support formula grants under Part B of Title III, and the remainding $10 million would support Endowment Grants under Part C.

We propose several changes to the authorizing statute to improve the Title III program. We request that the definition of an HBCU be amended to include only accredited institutions which were established prior to 1954 to educate Black Americans, or which had a predominantly Black enrollment prior to 1954. We also request that the allocation formula be modified to include measures of each institution's financial need to focus on the more financially needy HBCUs. Finally, we ask that the purposes for which funds can be used be broadened to include activities which improve management and increase financial resources.

Closely related to the Title III programs is the Minority Institutions Science Improvement program (MISIP) for which we request $5 million for fiscal year 1988, the same as is available for 1987. This program provides grant assistance to enhance the capacity of minority institutions to develop and maintain quality science education programs and to increase the flow of underrepresented minorities into the fields of science, math, and engineering. MISIP has and will continue to play a key role in assuring adequate access to quality postsecondary education by strengthening instruction and research at predominantly minority institutions of higher education, including HBCUs, and supplementing the other assistance available under the Title III and other Federal programs.

Aid to Students

The Special Programs for the Disadvantaged, commonly referred to as the TRIO programs, provide services to promote access to and retention in postsecondary education for individuals from disadvantaged backgrounds. Our request for these programs in fiscal year 1988 is $82.4 million, the same level as our 1987 revised request. We request support for only two of the five programs authorized under the TRIO authority--Student Support Services and Upward Bound. These two programs complement the financial assistance available to disadvantaged students by providing services designed to identify, motivate, and assist them to develop the necessary skills to complete high school, and enter and complete postsecondary education. Evaluations have found these programs to be very effective.

No funds are requested for the Talent Search or Educational Opportunity Centers programs. These programs provide academic and financial counseling services which duplicate State, local and institutional efforts and responsibilities. In recognition of these substantial efforts, we have developed a plan to provide additional training, under our student aid authority, for high school guidance counselors and financial aid officers. We believe that these efforts will make the elimination of these TRIO programs possible without adversely affecting the flow of financial aid information. In addition, we propose eliminating funding for the TRIO Staff Training authority in light of the extensive training which will be provided through our other training activities.

We propose to continue support for the Robert C. Byrd Honors Scholarship program. This program will provide direct financial support to students who demonstrate outstanding academic achievement and show promise of continued academic achievement. For this program, which was first funded in fiscal year 1987, we request $8 million.

Strengthening Postsecondary Quality

In addition to equalizing educational opportunity, we believe that the Federal Government can play a key role in improving the quality of higher education. To support this leadership role, we propose $7.5 million for the Fund for the Improvement of Postsecondary Education. This is the same level as our revised 1987 request. This program stimulates improvements in the quality of postsecondary education without intruding on institutional prerogatives.

While the funding level requested is less than in prior years, we believe that it is adequate for fulfilling this leadership role.

Academic Facilities

In addition to the programs discussed above which address our two priorities in higher education in fiscal year 1988, we propose support for only one other program, Interest Subsidy Grants. Under this program, the Federal Government between 1970 and 1973 entered into agreements with institutions of higher education which obligate the Department to pay the difference between 3 percent and the commercial lending rate at the time the loan commitments were made. Our 1988 request for this program is $22.5 million, $500,000 less

than 1987 level for this program, which would be sufficient to meet the annual subsidy costs of the current loan portfolio.

Other Higher Education Programs

The 1988 request proposes elimination of several programs in the Higher Education account. These programs have either fulfilled their original purpose, have provided services available from other programs, or are not fundamentally a Federal responsibility. These programs are very low priority and should be eliminated in order to help reduce the Federal deficit and to focus Federal expenditures on more critical areas.

The Cooperative Education and Law School Clinical Experience programs have fulfilled their original purposes. These programs have demonstrated the soundness of cooperative education and clinical legal education. The effectiveness of these educational methodologies have been well documented, and the institutions themselves would continue these programs without Federal support.

The Veterans' Education Outreach program has outlived its original purpose, which was to address the special higher education needs of large numbers of returning Vietnam veterans. The few veterans enrolled in institutions will find outreach and support services available through the general counseling and support services available at colleges and universities. For this reason, no funding is requested for this program in fiscal year 1988.

The graduate programs, including the Patricia Roberts Harris Fellowships, Jacob K. Javits Fellowships, and Legal Training for the Disadvantaged, as well as the Congressional Teacher Scholarships program provide financial support to students. There are already a myriad of other Federal and non-Federal sources of financial aid available for students, particularly needy students, and these programs are simply not necessary in light of the Federal budget deficit.

No funds are requested for International Education and Foreign Language Studies. These programs can best be supported by the institutions themselves and by the private sector. Where there are specific Federal needs relative to foreign language and area and international studies, those needs can best be met through specialized programs administered by other Federal agencies.

Finally, no funds are requested for the Innovative Community Services program, Assistance to Guam, the Robert A. Taft Institute of Government, or any of the other special higher education projects. These are all nonessential and, therefore, low priority. Moreover, these activities are more properly the responsibility of colleges and universities, State and local governments, and private sector users and beneficiaries of higher education services.

The Christa McAuliffe Fellowships program, for which funds were appropriated in this account for fiscal year 1987, is administered in the Office of Elementary and Secondary Education. The President's budget request for this program is discussed in testimony for the Special Programs account.

Fiscal Year 1987 Rescissions

The President also is proposing rescissions of $201 million of fiscal year 1987 funds. The proposed rescissions include: $4.7 million for the Fund for the Improvement of Postsecondary Education; $1.5 million for Innovative Community Services; $32 million for International Education and Foreign Language Studies; $14.4 million for Cooperative Education; $1.5 million for Law School Clinical Experience; $500,000 for Assistance to Guam; $750,000 for the Robert A. Taft Institute of Government; $94 million for Special Programs for the Disadvantaged; $3 million for Veterans' Education Outreach; $1.5 million for Legal Training for the Disadvantaged; $15.5 million for Congressional Teacher Scholarships; $14.2 million for the Patricia Roberts Harris Fellowships; $2.5 million for the Jacob K. Javits Fellowships and $14 million for special higher education projects. The activities proposed for rescission either duplicate or are similar to other Federal, State, or local programs, or are narrow in purpose and nonessential.

My colleagues and I will be happy to respond to any questions you may have.

Higher Education Facilities Loans and Insurance

I am pleased to have this opportunity to appear before you to present the fiscal year 1988 request for Higher Education Facilities Loans and Insurance. We are requesting no annual appropriation, a decrease of $19.2 million from the fiscal year 1987 level. No funds are requested under the permanent appropriation authority, and no new loan authority is being proposed. The resources of the fund are expected to be sufficient to finance all program operating costs, and to pay insufficiencies on issues of GNMA participation certificates.

During the period of substantial higher education enrollment growth in the 1960s, this program provided hundreds of long-term, low-interest loans to colleges and universities to finance academic facilities construction and renovation. Most of these loans are still outstanding, resulting in continuing operating costs associated with the portfolio. The program also has a "built-in" operating deficit which results from the interest being paid by institutions on their facilities loans being substantially lower than the interest rate at which the revolving fund reimburses the Treasury for loan capital.

We are not requesting authority to permit new loans. It is the responsibility of the institutions themselves, State and local governments, and private sector users and beneficiaries of higher education services to finance capital outlays for physical plant maintenance. To the limited extent that the Federal Government has an interest in higher education infrastructure, it relates to specialized research and development facilities and equipment. In this instance, however, other Federal funds are available through the broader and more appropriate research and development authorities of agencies such as the National Science Foundation, the Defense, Energy, and Agriculture Departments, and the National Institutes of Health.

The need for new general classrooms and related academic space has greatly diminished as postsecondary enrollments have stablized.

Moreover, the improved state of the economy has helped to reduce the need for general-purpose facilities assistance.

In addition to not making new loans under this program, the Department plans to offer prepayment discounts and to package and sell much of the existing loan portfolio as part of the administration's initiative to improve Federal credit management practices. The 1988 Budget estimates that approximately $48.3 million in revenue will be generated through prepayments and approximately $35.6 million in revenue will be generated from loan asset sales to the public in fiscal year 1988. We expect to revise these estimates in the coming months to reflect this year's experience with loan prepayments and sales to the public and the advice of the Department's financial advisor.

This concludes my remarks. My colleagues and I will be happy to answer any questions you may have.

College Housing Loans

Thank you for the opportunity to present the fiscal year 1988 budget request for the College Housing Loans program. This year, as in previous years, we are requesting no budget authority and no new loan authority. In addition, we are requesting supplemental appropriation language to withdraw the 1987 loan authority of $60 million.

As in prior years, the costs associated with managing and servicing existing loans, including the payment of interest insufficiencies on outstanding certificates of participation in the loan portfolio, would be financed from loan repayments and other income.

Our proposal to make no new loan commitments in 1987 and 1988 reflects our strong interest in curtailing nonessential expenditures and in eliminating unnecessary and expensive credit subsidies.

The program's revolving fund has a substantial outstanding balance of Treasury borrowings used in prior years as program loan capital. Continuing to loan these funds to colleges year after year requires the Treasury to keep outstanding a similar level of Federal borrowing from the public at the prevailing rate for long-term notes and bonds. As such, the Federal Government is effectively paying the difference between the average 3 percent interest rate on institutional loans and the prevailing interest rate for long-term Treasury borrowing. This subsidy results in a large off-budget program cost. This subsidy is especially unnecessary now in view of the healthy commercial lending markets and State and local bond financing available at relatively low interest cost.

In any event, declining enrollments are reducing the need for college housing. Approximately one-third of the Nation's colleges and universities experienced enrollment declines between academic years 1981 and 1984, and at best, overall higher education enrollments are expected to remain relatively stable over the next few years.

More important, the demographics of the college-going population are continuing to change in ways that will further lessen the demand for on-campus housing and other facilities. Increasingly, college

and university classrooms are filled by older students. In the fall of 1971, less than 30 percent of all college students were 25 years old or older. By 1985, nearly 42 percent of all college students were in this age group, and it is projected that this will increase to nearly 50 percent by 1991.

The significance of this demographic change is that older, non-traditional students rarely live on-campus. As a result, the demand for housing and other space can be expected to decrease even more so as these students grow to represent a larger and larger proportion of the college population.

Along with our request to discontinue all new loan assistance, the Department plans to continue to package and sell the existing loan portfolio. The 1988 Budget estimates that approximately $591.2 million in revenue will be generated from loan asset sales in fiscal year 1988. We may revise this estimate during the coming months to reflect this year's experience with loan sales and the advice of the Department's financial advisor, Chemical Bank. These loan sales will help to accelerate achievement of our objective to encourage greater private sector involvement in higher education facilities financing.

This concludes my remarks. My colleagues and I will be happy to answer any questions you may have.

Statement of Chester E. Finn, Jr.

Education Research and Statistics

Mr. Chairman and Members of the Committee:

We appreciate the opportunity to appear before you to discuss the 1988 budget for education research and statistics.

Fiscal Year 1988 Request

One of the Federal Government's foremost responsibilities in the domain of education is, as Congress phrased it in 1867, to provide information on "the condition and progress of education." Within the U.S. Department of Education, this responsibility rests primarily with the Office of Educational Research and Improvement (OERI).

For 120 years, OERI and its predecessors have gathered, analyzed, and disseminated information on education. On behalf of the President, I come before you today to request the resources necessary to carry on and improve upon this long-standing tradition.

We are asking in Fiscal Year 1988 for $70.2 million--the same amount requested for FY 1987, but $6.6 million more than Congress appropriated.

We realize that to request an increase in this tight budget year carries a solemn responsibility to deliver the maximum impact per dollar. We believe our plans will do so. The total request, $70.2 million, carries a price tag of $1.23 per student in the

U.S. The $6.6 million increase works out to less than 12 cents per student. For this small sum, we can put more comprehensive, more comparable, more reliable, more useful, and more timely information into the hands of more parents, teachers, and policymakers. As a source of guidance and direction for these and other Americans, as innumerable reforms ripple across 50 States and some 15,000 school districts in the United States, this modest investment would multiply and reverberate throughout the Nation's $282 billion education system.

Our request is made at a time when public interest in education shows no sign of abating. On the contrary, States and localities have intensified efforts to upgrade quality and strengthen performance in their schools, and education reforms have spread beyond the secondary grades to touch elementary and higher education as well. The current cry for greater U.S. productivity and increased competitiveness has heightened the sense of urgency. Clearly, America's desire for excellence in education has never been greater. And information about education--reliable, timely, and useful information--has never been more important.

We would use the $70.2 million to strengthen the Nation's scientific knowledge of "what works" in education and to get this knowledge into the hands of parents, practicing educators, policymakers, and other education-minded Americans. In support of our efforts to reach these two goals, $21.6 million would go to the Center for Education Statistics, $21.5 million to the Office of Research, $19.6 million to Programs for the Improvement of Practice, and $7.5 million to Information Services. Under this plan, $64.6 million, or 92 percent of the FY 1988 request, would meet or exceed FY 1987 spending levels for congressionally mandated activities.

The lion's share of the FY 1988 request would thus support continuation of these well-established programs and activities. The remainder would provide for much-needed improvements. It would enable us to strengthen virtually every major data-gathering and assessment activity of the Center for Education Statistics, initiate new research center activities to study school leadership, double the scale of the field-initiated research program, redirect and modestly expand the ERIC system, launch new studies on the impact and effectiveness of school reforms, and upgrade an array of systems and projects for disseminating information to practitioners, parents, and policymakers.

Center for Education Statistics

Of all the Department of Education's work, that done by the Center for Education Statistics (CES) is most fundamental. Its name has changed several times since 1867 when it was created, but its mission has remained the same: to collect, analyze, and report statistics on the condition and progress of education in the U.S.

The President's request for CES, a $7.5 million or 53 percent increase over the FY 1987 level, would expand and upgrade the Center's data-gathering, analysis, and reporting activities. These improvements are crucial to providing an accurate picture of the condition of America's schools and colleges, and would allow for more precise and useful comparisons across States, regions, localities, and time.

Nearly $3 million of the increase would add important information to extant CES data on elementary and secondary schools, administrators, and teachers, both public and private. The largest portion of these funds would be devoted to the first "school and staffing" data collections under the redesigned elementary/secondary statistics program. The school and staffing surveys would answer vital questions about the teacher workforce--about their qualifications, classroom practices, working conditions, and changes in supply and demand for teachers in coming years. The surveys would also increase what we know about school policies, practices, programs, resources, and administrators across the U.S. Funds would also be used to upgrade the coverage, quality, and consistency of State financial data, yielding more State-specific data and making cross-State comparisons more reliable and useful to policymakers.

About half the increase, $3.7 million, would go to other studies of student achievement and progress. The National Assessment of Educational Progress (NAEP), our Nation's biennial report card on what U.S. students know and can do, would receive urgently needed resources for its next assessment. The assessment cycle to be conducted in FY 1988 would examine student performance in reading, writing, citizenship, and U.S. history. Some FY 1988 funds would be used to analyze data collected in 1986 on student performance in math, science, reading, and computers, as well as to plan subsequent national assessments so that data would be comparable State-by-State. Part of the 1988 increase would go to developmental activities for the first follow-up of the new longitudinal study of 1988 eighth graders. This study will yield information on student background, achievement, and coursetaking, as well as on dropouts, parent involvement, vocational programs, school climate, and school effectiveness.

Most of the remaining increase would be used to expand what we know about postsecondary education. The new postsecondary surveys now in place are conducted annually in some 14,000 institutions (compared with only 3,000 in earlier collection efforts). Our new system allows us to publish "Early Estimates" in December following each fall data collection. These estimates will touch on all sectors of postsecondary education and will include 18 key items such as enrollment, degrees, finance, staff, and salaries. The new college and university faculty and staff survey would furnish much needed information on the people who determine much of the content of postsecondary curriculum, the assessment of postsecondary student performance, and the quality of student preparation for careers. They are the backbone of higher education, yet we know little about them. The survey would provide information on their academic credentials, teaching workloads, compensation and benefits, institutional roles, and attitudes and perceptions.

Office of Research

The Office of Research (OR) supports systematic studies to improve education--by funding and coordinating a national network of university-based research centers, by administering field-initiated research grants and several small grant programs, and by conducting intramural research.

More than $18 million of the request for OR would continue to

support university-based research center studies in many fields, including teacher education, teacher working conditions, and bilingual and second language education. These funds would also help pay for center-based research, begun in FY 1987, on teaching and learning in five key subjects. We anticipate that this research would be conducted in collaboration with other Federal agencies such as the National Science Foundation, the National Endowment for the Humanities, and the National Endowment for the Arts. The university-based centers would study what teachers teach and what students actually learn in math, science, literature, history, and the arts. Also, the centers would work to develop better means for assessing learning in these disciplines.

Included in this $18 million is $1.0 million to launch a new center for studying school leadership. District administrators and building principals, perhaps more than any other group, hold the power to improve our schools. The new center would focus on conditions that affect school leadership and measures that could strengthen it in schools and school districts throughout the U.S.

In the past few years, many States have implemented education reforms and are now eager to know what difference their efforts have made in school and student performance. Instruments for analyzing reforms and assessing their impact--and for mapping reforms across the 50 States and territories--would be developed with OR funding. As a result, policymakers and educators would be able to compare and assess the effectiveness of various reforms undertaken around the Nation and thereby improve plans for boosting student achievement in their own schools.

OR would support research fellows, sponsor a small grant competition for the study of civic and moral education, and again accept research proposals for the field-initiated research grant program. Given the extraordinary participation in previous field-initiated grant programs--some 340 applicants in 1986--funding would be increased to $1.0 million.

Programs for the Improvement of Practice

Programs for the Improvement of Practice (PIP) aims to make sure that what we have learned from research and practice is examined, distilled, and communicated to teachers, administrators, and others seeking to improve American education.

Of the sum requested for PIP, nearly $18 million would continue to fund the nationwide network of regional laboratories. These nine institutions are located across the U.S. and serve all 50 States, the District of Columbia, and the trust territories. Each lab would continue collaborating with State education departments, school districts, colleges and university-based research centers, and private firms in an effort to put the best research and practices to work in schools throughout the region. In FY 1988, labs would focus on identifying effective teaching and school leadership techniques, making research useful and available, developing training materials, and providing technical assistance in school improvement efforts. Also, a comprehensive four-year evaluation of the labs, begun in FY 1987, would continue in FY 1988.

In addition to the labs, PIP would sponsor seminars and

meetings with professional educators and organizations--meetings that would result in publications on topics critical to education improvement. For example, PIP would meet with urban superintendents on the dropout problem; with evaluators of State reform on how the several States are tracking the implementation and assessment of reform policies; and with leaders in higher education on current practices in assessing instruction, management, governance, and outcomes of higher education.

PIP would publish its findings from research and practice in about 10 booklets designed to help policymakers, teachers, parents, and school board members make sound education decisions. To help fill the current lack of materials available for trsining principals, PIP, in a joint effort with the Office of Research, would fund development of a "casebook" on the principalship.

PIP would also offer small research grants to practicing teachers. This new Teachers as Researchers program would enable classroom teachers to make their own contributions to education research. Finally, the Teacher Education Development Program, completing its third year, would support 29 university-based projects to plan, implement, document, and evaluate research-based improvements in teacher education programs. Information from the 29 projects would result in a publication of "lessons learned" about teacher induction programs, alternative certification programs, teaching in the content areas, and technology as an education tool.

Information Services

Information Services (IS) offers assistance to individuals and organizations outside the Department of Education. IS maintains the Department of Education Research Library, administers the Education Resources Information Center (ERIC), and answers education-related questions from around the Nation on a toll-free number. IS also writes, edits, produces, and disseminates many OERI products.

Over 80 percent of the IS FY 1988 sum, $6.1 million, would go to the ERIC system. This 20-year-old education information service is undergoing major redesign, which is scheduled for implementation in FY 1988. The redesign would shift ERIC emphasis in three areas: to meeting the needs of a far broader education community, including policymakers, teachers, parents, school boards, and the media, as well as the research community; to increasing dissemination efforts, particularly by capitalizing on technological advances; and to seeking more balanced treatment of the full range of valuable education information--statistics, government reports, published studies, unpublished materials, and virtually all journals.

An additional $250,000 in new dollars would help launch ACCESS ERIC, a new effort to make ERIC more accessible and available to a broader range of audiences. ACCESS ERIC staff would work with an extensive network of professionals in State education departments, teacher centers, association offices, central offices of school districts, private school representatives, and school and university libraries in an effort to market ERIC products.

During FY 1988, OERI proposes to develop and begin operation of EDsearch, a computerized telecommunications system that would give teachers, administrators, policymakers, and journalists instant access to research results. EDsearch would narrow the gap between the time a study ends and the time its results are disseminated.

Public awareness of and access to the results of OERI-sponsored research would multiply through the continued dissemination of data tapes and expansion of telecommunication links and electronic bulletin boards. In addition, links with other large education research libraries and online access to some 300 education and social science databases would enable the OERI Education Research Library and the IS Information Office staffs to respond quickly and comprehensively to the increasing number of requests they receive.

Conclusion

This blueprint for OERI activities in FY 1988 would help guide and inform countless efforts to achieve excellence in schools across the Nation. It is a thorough and efficient blueprint--one that I believe would play a valuable role in improving the performance of schools, colleges, teachers, and students throughout the United States.

Of course, information, knowledge, and understanding alone are not enough. But better information, more knowledge, and greater understanding can enable Americans to see clearly the kinds of schools they want--and the wise policies and hard work it will take to get them. Today, perhaps more than ever, education excellence is what Americans want, what their children deserve, and what America's future depends on.

We in OERI are firmly committed to doing our part.

Libraries

I appreciate this opportunity to discuss with you the Department of Education's 1988 budget request for library programs.

Rationale for Zero Budget

We are again requesting no funding for library programs. We believe strongly in the value of libraries for the Nation, but the Federal programs we are discussing today play very minor roles in the overall financing of the Nation's libraries--the current funding of $132.5 million representing roughly 2 percent of the Nation's library budget from all sources. These programs were established in response to national problems of inadequate access to libraries, shortages of qualified librarians, and inadequate library linkages and sharing. But today, we can see that these Federal programs have fulfilled their original purposes and can reasonably be discontinued, particularly during this period of limited Federal resources, letting the States and localities assume full responsibility for these activities. This we believe is appropriate.

Library Services and Construction Act

It is time to end Federal support of LSCA programs which over the past 31 years has totalled about $2 billion.

Since 1956, when the Public Library Services program began, access to public libraries has increased from 56 percent of the total population to a current figure of about 96 percent, probably as high as can practicably be attained in this country. Most States have assumed strong leadership roles in providing public library services. Nearly all States now have programs of State aid to local libraries. About 96 percent of the total funds spent on public libraries in 1985 was derived from State and local government funds and from support from the private sector.

The Public Library Construction program has provided States with over a quarter of a billion dollars during the past 23 years for over 3,000 projects to build and renovate libraries.

Almost $130 million in Federal seed money has enabled the Interlibrary Cooperation program to develop model programs that have helped libraries across the country begin to share resources and form library networks.

State and local governments should now be able to assume fiscal responsibility for these programs.

The Library Literacy Program is not a critical investment. The number of library literacy projects reported by the States more than doubled between 1980 and 1984 without the aid of this relatively new program, indicating that the program is not necessary to increase the number of literacy projects in public libraries. In addition, the administration, as part of the fight against illiteracy, is requesting a 20 percent increase for Adult Education Grants to States. This should more than offset the reduction requested here, as well as permit greater coherence in the design of programs at the State level.

Higher Education Act

The three small discretionary grant programs which assist libraries through support from title II of the Higher Education Act are no longer critical Federal investments either.

The Library Career Training program is no longer necessary. Reports from the Bureau of Labor Statistics indicate that the supply of qualified librarians, so critically short in the 1960s and 1970s, is now adequate to maintain the quality of library services.

The Library Research and Demonstrations program, which supports research on the uses of new technology in library and information science, has also outlived its usefulness inasmuch as uses of this technology have now been adequately demonstrated and the remaining research needs can be met through the Department's other research programs, other Federal agencies, such as the National Endowment for the Humanities, and private foundations and research groups.

The activities supported under the Research Libraries program, assisting major research libraries to acquire and preserve materials, promoting interinstitutional cooperation, and setting up data bases

to catalogue publications, are more appropriately the responsibility of the institutions themselves, which can fund these activities out of their own resources or through the assistance of the private sector or other Federal agencies.

Proposed Fiscal Year 1987 Rescissions

For the same reasons underlying our zero funding request for library programs in fiscal year 1988, we are also recommending a reduction in 1987 of $34.5 million through rescissions which would eliminate all fiscal year 1987 funding for library programs except for Public Library Services and Interlibrary Cooperation, leaving $98 million available in fiscal year 1987. These two programs are not proposed for rescission because they are current-funded, and States have already begun expending the funds.

Summary

I am a frequent library user, and I know that library services are vital to educational excellence and community well-being. However, both the Secretary and I believe that, in a time of limited resources, these programs do not warrant funding at the expense of other more pressing needs, particularly since these programs have achieved their programmatic goals. These activities are already primarily the responsibility of States, localities, and the private sector and will continue without Federal support. I therefore ask you to consider termination of these library programs.

SELECTION OF GRANTEES

Senator CHILES. Thank you. Knowing of Senator Weicker's interest in this area, it might affect his blood pressure to ask questions first.

Senator WEICKER. No, no; I have got some questions which are slightly different from those in the past.

Dr. Finn, as I understand it your title is Assistant Secretary for Educational Research and Improvement. Is that correct?

Mr. FINN. Yes, sir.

Senator WEICKER. At last year's hearings we discussed the process the Department used to select grantees under a $2.6 million competition entitled, "Content, Character, and Choice."

Mr. FINN. Yes, sir.

Senator WEICKER. If you recall, the subcommittee expressed its deep concern over the number of applications approved, which did not rank high enough to originally merit an award. Do you remember that?

Mr. FINN. I remember the discussion.

Senator WEICKER. In your capacity as counselor to the Secretary, you had directed that certain of these lower ranking proposals be funded. Your fiscal year 1988 budget documents indicate that a policy has been developed and implemented requiring peer review and expert advice on all major program decisions.

I refer to page 306 in the document, in which you state, "Comprehensive peer review: A policy has been developed and implemented requiring peer review and expert advice on all major programming decisions."

Now, under your new plan, will political appointees be prevented from influencing the peer review process?

Mr. FINN. The purpose of the peer review process is to give us diverse expert opinions from scholars and practitioners about which projects among many competing projects ought to be funded.

These are recommendations to the Secretary, or to the Assistant Secretary, as the case may be, and we take the recommendations and we ordinarily accept them, except if there is an issue such as geographic distribution or fairness involved.

Senator WEICKER. So it would be fair to say the peer review process is one based on academic merit rather than political merit. Would that be correct?

Mr. FINN. Merit. Academic merit, substantive, professional.

MICHIGAN STATE UNIVERSITY PROPOSAL

Senator WEICKER. Last summer, when your staff was preparing for the review of a proposal from Michigan State University, you wrote an internal memo saying you were concerned about the kind of reviewers they were selecting. Let me read to you part of what you said in the memo as well as an electronic communication.

Now reading from the bottom portion:

• • • which leads me to this question, unless it is illegal or plainly unethical, after you have got a slate you are pretty comfortable with, do you not think you should

phone up David. He was the one as I recall applying for the grant, right? Call up David and read him the names and give him the opportunity to indicate if he thinks any of the individuals on the list would not be openminded or disinterested judges.

He does not get a veto, of course, just the opportunity to try to persuade you. That is my view.

And in the memorandum dated July 13, 1986, to Sally Kilgore, is it? Sally Kilgore, from the Assistant Secretary for Research Improvement, counselor to the Secretary, I approve. But before we complete these arrangements would you please think long and hard once again about whether Michigan State University is going to get a fair hearing from this panel.

You have heard David Cohen say, and I have heard him say on several occasions, that the new Michigan State University center is organized around the concepts which the quote, 'teacher education establishment, quote, cannot stomach.

This is a substantial part of what made it worth our taking a gamble on. Yet every single member of this review panel is a faculty member in the school of education, except Frank M. Are you not asking the cardinals of the Catholic Church to review the work of Luther and Calvin?

Now I would like to know, and this is a memorandum, I repeat, from you. Now is this your concept of the peer review process, that you proudly refer to in your budget document?

Mr. FINN. Well, sir, let us set the situation in context. It was not a funding decision that occasioned the documents you are reading from. That was a center we had funded the previous year on the basis that it was going to demonstrate in 1 year whether it deserved a second year's funding. This was a continuation review.

Professor David Cohen, the project director at Michigan State University, a very distinguished scholar, had been in to talk about the criteria by which his center's work would be judged after the first year, as it was being reviewed to see whether it should be extended for the second year.

We agreed with him at the time that we would appoint a review panel, not a funding review panel, but a panel to recommend the continuation or noncontinuation of something that had already been funded. We also agreed with him at that time that we would welcome advice from him as to the kinds of people who could fairly judge an unconventional center, because his center had been funded, in part, on the basis that it was proposing unconventional approaches within the context of teacher education.

We had an absolutely straightforward understanding with him that we would seek his advice about the nature of the review process and reviewers. It is one of my most serious responsibilities to make sure that we do fair reviews. This was an attempt to ensure a fair review for a very good but unconventional center that was being considered for a continuation.

Senator WEICKER. I fail to see how the person who is the recipient of the moneys, whether they were continuing or whether they were original, should be the one to in any way determine the composition of the

reviewing panel. Does this come as a little bit of a surprise to you? Would that bother you a little bit?

Mr. CARNES. This is the first time that I have been acquainted with this particular case. In the absence of understanding the full situation, I am not really competent to comment on that particular review.

I will say that customarily in peer review, and I am not just referring to the Department of Education but to the National Science Foundation, the National Institutes of Health, and other agencies that particularly when you have a situation where you are doing something that can be considered unconventional, that you want to ensure that you do not have a collection of reviewers that are all biased in any particular direction.

You never want a collection of reviewers that are biased in any one direction. Every reviewer has his own particular concerns. What you are always trying to achieve is a mixture, if you can, of different points of view so that the application gets looked at from all different angles.

In that context I would say that an effort to try to ensure that that kind of review panel is constructed is not an inappropriate effort.

Senator WEICKER. And you feel that the person who is a recipient of the moneys is one who should sit in judgment on the panel that is going to judge him or her? Is that correct?

Mr. CARNES. I do not think that this person should have the ability to determine who is going to be on that panel and not going to be on the panel. I do not think that is what Dr. Finn was saying either.

Mr. FINN. The memo that you quoted does not indicate that he was picking his reviewers. Rather, that we solicited his advice. And I think that was absolutely appropriate under the circumstances.

Senator WEICKER. Do you think there is a slight conflict of interest there?

Mr. FINN. Certainly not in giving or receiving Cohen's advice. The other possibility is that his center, a new center trying to do an unconventional thing in the very important field of teacher education, would get a prejudiced hearing by people who did not approve of the research strategy that he had adopted.

Senator WEICKER. Let me first of all ask this question. Do all applicants get the opportunity to influence the selection of the peer review process?

Mr. FINN. Senator, this was not an applicant. This was a review of something we had granted.

Senator WEICKER. Fine, fine. All right. Let us say a review of an already handed out grant. Do all those types of individuals get the chance to go ahead and influence the selection of the committee?

Mr. FINN. Senator, it is written in our authorizing legislation, with respect to labs and centers and most of our other major activities, that we will seek the advice of the currently funded agencies when we run any kind of a competition. And that advice frequently includes inviting them to suggest individuals or categories of individuals who should take part in the planning and review process.

They have never either made the selection or vetoed a single selection.

Senator WEICKER. Would you please explain the terms, you heard David Cohen say and I have heard him say on several occasions, that the new Michigan State University center is organized around concepts, that the, quote, teacher education establishment cannot stomach.

What is the teacher education establishment that we are talking about?

Mr. FINN. In general it is people who teach and preside over colleges of education. Professor Cohen's center, which is studying teacher education, has the unconventional notion that you do not need to go to a college of education to become a good teacher. A notion that I believe deserves a fair hearing.

Senator WEICKER. And you do not feel that it is possible for you to go ahead and construct a peer review panel without the assistance of Professor Cohen?

Mr. FINN. I think we certainly could. And, in fact, we did construct a fine peer review panel, and he did not designate its members. But it was absolutely legitimate to seek his advice about the kinds of people he felt would be openminded about the unconventional research approach that he has undertaken.

Senator WEICKER. What do you mean by the sentence, he does not get a veto of course, just the opportunity to try to persuade you?

Mr. FINN. That is exactly what I have just been saying. He did not have an opportunity to either designate or veto any individual.

Senator WEICKER. Well, if you will recall last year—there is no point in pursuing the question I think the facts speak for themselves and I hope that facts are brought to the attention, not only of the committee but the American public.

Last year we had our doubts in the way that you used the peer review process and your selection of who got what, at what point in the list of those that qualify. As I said, the committee was considerably upset by the fact that many of the lower ranking grants got funded. And we expressed ourselves to that extent.

I gather that has meant something to you, and I read the statement from your budget document this year indicating that action indeed was being taken to address that subject. And I would suggest to you when I get internal memoranda such as I have read here, nothing has changed. All this is is a veneer. This is not a peer review process that is worth anything.

First of all it was not worth anything last year, when the peer review process handed in its results, and you overrode the results. This year you are going to make darn sure that the panel itself comes up with the right results. Now if you do not want a peer review process, fair enough.

There are those of our colleagues, indeed some of the more humorous experiences I have had on the floor have come from Senator Hollings, who thinks that too many of the peers, or pears as he calls

them, come from the Northeastern United States. Fair enough. He is not much on pear review. Fair enough. That is what he says. He is right up front with it.

But this process here, and the terminology, the context, exactly what happened, I think is a disgrace to peer reviewers specifically, and certainly to the entire educational establishment secondarily.

There is no reason in the world why you could not have had somebody review the work of Dr. Cohen without consulting with Dr. Cohen, or having Dr. Cohen pick who was going to do the review.

Mr. FINN. Senator, he did not pick them.

Senator WEICKER. No; he had a chance to influence as to who was going to be on that panel. As you say, persuade. As you say in there that he gets, quote, you know how you have the word fair? You have it in quotes. Fair hearing. Fair, in quotes.

And I have used up the first portion of my time. My other questions will deal with the issues of the handicapped and disabled. But I tell you, it is a little distressing to find this lack of integrity, this lack of integrity on the part of an Assistant Secretary. And I would hope that the Secretary would take a careful look at this situation.

Mr. Carnes, I would hope that you would take a careful look at this situation and get back to this committee, with an explanation or a disavowal of this type of a procedure.

Mr. CARNES. We will get back to you, Senator.

Senator WEICKER. Thank you.

OTHER PEER REVIEW SYSTEMS

Mr. CARNES. If I could just make one point.

I am not commenting on this particular case, but one of the key features of peer review, in the agencies with which I am familiar and in the various peer review systems that exist in the Government, is that peer review relies heavily upon outside reviewers who provide recommendations to the program officials, with the understanding that these are advisory recommendations rather than absolutely binding ones.

That is distinct from the situation in many of the other programs that we operate in the Department, and obviously you are well aware of this, in which we are almost always bound by whatever the reviewers' rank order is. In fact, the program office hardly has any say in what goes on at all.

I might also point out that in the case of the discretionary funds last year, in the 1986 competition, there was complete adherence to the rank order provided by the peer reviewers.

Senator WEICKER. Fair enough. Fair enough. That came to pass after our last hearings. But this clearly is a political distortion of the peer review process. I would far rather, as a matter of fact, just do away with it, than to have this type of activity go on.

I repeat, I have no fault to find. If you are going to use that process then we abide by it. But to come in through the back door, through another way if you will to achieve the same result, I do not think that does credit quite frankly to the integrity of the Secretary.

I disagree with the Secretary on just about everything that people can disagree on. But I will say this, he stands up and he gets counted. This is not standing up and getting counted.

Mr. CARNES. We will look into the situation and report back to you.

HANDICAPPED EDUCATION

Senator CHILES. Ms. Will, in my review of the fiscal year 1988 budget, I have been distressed to find administration backpeddling on commitments that it made last fall. The President signed the Anti-Drug Abuse Act with great fanfare, and proceeded to slash his budget request to carry it out. The same thing seems to be happening to the education budget for the handicapped.

The Department has not requested funding for new grants for infants and family programs, which was created by Congress last year under the guiding hand of Senator Weicker to help States provide services to handicapped infants and toddlers. I understand you do not dispute the value of these early prevention programs. But you argue that the Department of Health and Human Services already operates programs to provide services to younger handicapped children.

We hear from parents of the very young handicapped children that they cannot find appropriate education-related services for them. At a hearing I conducted recently in Tampa, one woman, Mrs. Kay Warren, talked about receiving services for her young blind son while she was living in one county, but unable to receive similar services when she moved.

She was told her son would not be eligible for any services in the public school system until he turned 3. The result is a measurable setback in that child's education development.

EDUCATION-RELATED SERVICES AVAILABLE TO HANDICAPPED CHILDREN

Which health and human services programs are available to give education-related assistance to young handicapped children like Kay Warren's son?

Ms. WILL. Senator, our position with respect to the Infant and Toddler Program has really been very consistent. We have been extremely concerned about the fact that there is a void of information regarding the population to be served, the kinds of services required, and the funding streams available for providing those services.

We initially asked for a delay in reauthorization, in order to have some time to acquire the information. When the bill was moving through the process, one of our requests was for a study that would allow us to acquire the information that we feel is necessary in order to craft a good infant-toddler program. Our position was basically that it was premature to go forward and develop the zero to two program without this information.

We do not know specifically the amounts of money that are provided from HHS to support this population. Some maternal child health funds, perhaps some title XX dollars, but we do not know how much——

Senator CHILES. Are those education-related funds?

Ms. WILL. We are speaking about health services with title XX.

Senator CHILES. Well, the intervention funds that Senator Weicker promoted and all did provide a means of providing this kind of service. So, you are saying you all are consistent. You are just going to study it. Is that the consistency?

Ms. WILL. There is a requirement in the law for us to conduct a study and produce a report within 18 months, and we are moving very rapidly——

Senator CHILES. So, I will just tell Mrs. Kay Warren that we are studying it now and her son can reach 3, 4, or 5 before he gets any kind of services?

Ms. WILL. Well, I think that is a tragic thing, given that we know the effectiveness of the services. But it is also a problem to ask States to develop——

Senator CHILES. I think you have answered it. It is tragic, given that we know the effectiveness of the services. And we know that this is not only humane. We know that it makes sense fiscally, to give this kid something when maybe he has a chance to be a gainfully employed citizen, not be institutionalized or something else.

PROPOSED 1988 FUNDING LEVELS FOR HANDICAPPED EDUCATION AND REHABILITATION SERVICES

Yesterday morning I questioned Secretary Bennett about your fiscal year 1988 funding request for education of handicapped and rehabilitation services. To follow up with that, your fiscal year 1988 request for these programs assumes the enactment of sizable rescissions in 1987.

As you know, Congress rejected all those rescissions you proposed. As a result, your fiscal year 1988 request for handicapped education and rehabilitation services is way below the 1987 funding level—10½ percent to be specific.

Do you think a cut of this size is consistent with the Department's claim of a strong commitment to aiding the handicapped?

Ms. WILL. I think our budget is an extremely responsible one. We allowed for increases in basic State grant programs, both in special education and rehabilitation. That really constitutes the bulk of the funding. In addition, we are recommending a $50 million increase for the preschool program for 3 to 5 year olds.

Our budget request with respect to the State grant program in special education——

PRESCHOOL INCENTIVE GRANTS

Senator CHILES. But that preschool grant was $180 million in fiscal year 1987, and it is now down to $85.5 million in fiscal year 1988?

Ms. WILL. Yes; we were——

Mr. CARNES. The appropriation was quintupled in fiscal year 1987 over the fiscal year 1986 level. We have been supportive of preschool incentive grants. In fact in our own budget we provide for a tripling of the funding level for preschool incentive grants.

But the actual increase in the appropriation from fiscal year 1986 to fiscal year 1987 was almost fivefold. Our proposal would have allowed a threefold increase in funding there. I do not think that that can be portrayed as a lack of commitment, in the circumstances under which we are working, unless you are suggesting that what we should do is cut some other area of the budget and put additional funds in here.

We are certainly willing to discuss what other areas of the budget ought to be cut in order to increase these funds, but I think that a 200-percent increase is not to be construed as insignificant.

Ms. WILL. The amount rises from $110 to $600 per child, which we consider to be a significant incentive. There is $300 per child under the preschool program and, in addition, the State is allowed to count the child under EHA—part B for another $300.

TRIO PROGRAMS

Senator CHILES. Mr. Kimberling, many Members of Congress are strong supporters of the special programs for the disadvantaged, commonly known as the TRIO programs. I know of many TRIO success stories in my own State of Florida. For example, the University of Florida Upward Bound Program has placed 88 percent of its participants in the college or university of their choice.

A look at the fiscal year 1988 budget request for TRIO, which cuts funding by over 50 percent and eliminates three of the five TRIO programs, the administration does not seem to share Congress' enthusiasm.

Why do you propose cutting these programs, especially when Department officials speak of the Federal responsibility in equalizing educational opportunity?

Mr. KIMBERLING. Well, Mr. Chairman, we would continue funding for both the Upward Bound and the Student Support Services Programs, so there would still be an opportunity for continued Upward Bound projects.

Senator CHILES. You are cutting those programs by 43 percent, right?

Mr. KIMBERLING. We would cut from the present level of funding.

Senator CHILES. Forty-three percent?

Mr. KIMBERLING. I believe that is the correct figure for Upward Bound. We look at the other components of the TRIO Program differently. I might start with the smallest component, the training grants.

We have consistently opposed funding of this $1 million component of the program on very simple principles, that one should not have as a separately funded program a training component for project personnel administering grants funded under the same panoply of programs.

I know of no other Federal program that does this. This is not the kind of training program that you find, for example, in bilingual education or the training of personnel working with the disabled, where you are training the field. In this case the training is specifically focused on project administrators in the other components of the TRIO programs.

As a basic part of competing any grant program, we have long had the principle that well-prepared and professional project personnel, pro-

vided by the institutions administering the grants, are a prerequisite. And we keep coming back with this particular point time after time. On the training program, we hope that the Congress——

Senator CHILES. Have not every evaluation which you have done found these programs to be highly effective?

Mr. KIMBERLING. Evaluations have shown them to be relatively effective. I would point out the training component, however, is not a direct services to students program. This is purely extra money for the project personnel.

TALENT SEARCH AND EDUCATIONAL OPPORTUNITY CENTERS

With respect to talent search and the educational opportunity centers, the two other components that we would not provide funds for, we think that the funding here is highly duplicative of the role of college admission personnel and counselors, both at the high school level and at the college and university level. It also duplicates to some extent our own efforts.

We provide 6 million brochures on Federal student aid programs that are disseminated across the country. There are numerous——

Senator CHILES. You think the brochure takes the place of the TRIO programs?

Mr. KIMBERLING. No, sir; I do not. But I do think that in today's situation, where you have got a demographic shift from the baby boomer generation to the baby trough generation, that it is in the interest of colleges to recruit their own students.

Senator CHILES. You know, they are recruiting. And they can recruit the bright black students and the bright disadvantaged students. They fight like hell over them. Everybody in the world is trying to get them. They can have their pick.

We are not talking about the ones that are gifted. We are talking about those that need a little boost so that we can put them into the mainstream. We have got a program at the University of Florida that is 88 percent effective in putting a student into the school of their choice.

My gosh, I cannot think of any kind of ratio where we see numbers like that, and they are not taking the ones that are the superstars to start with, because they do not need this program.

And then you are saying, well, we print 5,000 brochures and we send them out to those people. That is the most miserable kind of answer that I could ever think of hearing.

Mr. KIMBERLING. Well, Mr. Chairman, as I indicated, we would provide some continued funding for Upward Bound. We have consistently——

Senator CHILES. Yes; 44 percent cut.

Mr. KIMBERLING. We have consistently said, despite the problems with the deficit, that there are components of the TRIO Program which we feel are worthwhile and worth supporting at the Federal level.

Mr. CARNES. Could I add just one point, Mr. Chairman, if I could.

One of the features of this program that is troubling to us is the same grantees that have received these funds for the last 20 years tend to be the only grantees who get the money. Whatever funds are provided——

Senator CHILES. Is that right?

Mr. KIMBERLING. That is correct. There is priority written in——

Senator CHILES. Mr. Finn cannot stack the deck, so you get some new grantees? It seems to me that you all have been pretty successful——

Mr. CARNES. Well, Mr. Chiles, I do not think that is the question. The fact is that the program requires us to give the same institutions priority for the grants year after year.

What I would suggest is that whatever funding level is provided in this program be spread around to institutions throughout the country so that other institutions can begin their own efforts at recruitment rather than just the same institutions which perpetually get the grants. They get grants year after year after year.

If I could just add one more point, I think you raised an interesting issue about whether black students at high achievement levels have trouble getting into college. Obviously colleges are recruiting very hard to get new students.

We released a study 3 days ago which indicated that, based on the high school and beyond study, at any given academic achievement level in high school, blacks are as likely to go to college as whites. This is based on the high school and beyond study data. We have released the study.

The interesting thing that the data shows, though, is that they go to college at the same rate no matter what their achievement level. Since many blacks are clustered at the lower end of the academic scale, as you correctly pointed out, what the study really points back to is the necessity to assure that their elementary and secondary training is such that blacks can reach higher achievement levels in high school so that they, in fact, can move up there.

That is not so much a function of programs like TRIO. It is, however, a function of programs like the chapter 1 program that we are talking about. We propose that we concentrate more resources on kids such as the ones you described, kids who are low income, who are academically more needy, and who at the same time can benefit through programs that are results-oriented.

Senator CHILES. We are for those programs, too. Again in answer to you, you have a few universities that are getting all these funds, probably with a limited amount of funds, this happens. But now you are talking about spreading those limited funds over more universities.

We want to increase these funds. Let us add some more universities.

Mr. CARNES. I agree with that.

Senator CHILES. If you want to change the level, let us do that.

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LIBRARIES

Mr. Finn, you justify termination of the Federal assistance to libraries by saying that most Americans now have access to library facilities. This assertion begs some pretty important questions, such as limited access, quality, and modernization requirements.

Can you assure me that our Nation's libraries, particularly in some of our rural and poor parts of the country, no longer need Federal library assistance?

Mr. FINN. Senator, I can assure you that the libraries exist, that they are within reach of nearly all of the population, and that they are doing their job with about 97 percent State, local, and private support.

It is our contention that the 3 percent which is Federal has achieved the purpose of providing access, and in a tight budget situation is not indispensible.

Senator CHILES. I think the same kind of argument is here; very much like it is in the situation with vocational education. You are getting a lot of bang for your buck with the 3 percent, and you are being able to give some direction to this program. I think it makes a lot of sense.

Senator HARKIN. May I say something, Mr. Chairman?

Senator CHILES. Yes.

PRESIDENT'S COMMISSION ON LIBRARIES

Senator HARKIN. I am glad you asked that question. I had not anticipated asking it myself, but hearing Mr. Finn's answer I am just again curious as to why they have increased the funding for the President's Commission on Libraries, and decreased the amount of money they are going to give the States for library services.

Am I incorrect in that?

Mr. CARNES. I am not sure I can respond to that question, Senator. If I can just elaborate for a second on what Dr. Finn said about libraries.

These, in our opinion, are classic examples of programs that have, in fact, satisfied their original statutory purpose. We would not dispute the point that it would be desirable for Federal funding to go in perpetuity for these libraries. But the funds have, in fact, achieved their statutory purpose. There is, in fact, a limited amount of funds available for education, and I do not see anything in this budget that ought to be cut more in order to provide funds for libraries.

Senator HARKIN. I just find it interesting that you would increase the funding for the President's Commission on Libraries. I find it an interesting little twist.

Mr. CARNES. I am not familiar with what figures you are using or——

Senator HARKIN. Well, I raised it once in another hearing that we had.

Mr. CARNES. That is not in our budget. We do not fund the Commission.

Senator HARKIN. I am not talking about you, I am just saying this administration——

Mr. CARNES. Oh, I am sorry. I thought you said it was interesting that we did not do it, and I thought you meant the Education Department.

Senator HARKIN. No; I am just saying the administration is trying to cut this, and yet increase the funding for the President's Commission on Libraries. I just find it very odd. I am sorry to take your time.

Senator CHILES. Senator Weicker.

Senator HARKIN. What is that?

Senator CHILES. I was going to call on Senator Weicker.

Senator HARKIN. I have a couple questions, but that is all right.

Senator CHILES. Go ahead.

Senator HARKIN. I will go after Senator Weicker.

EARLY INTERVENTION SERVICES FOR INFANTS AND TODDLERS

Senator WEICKER. Madeleine, as a rationale for a zero funding request for early intervention, you state in your testimony that Medicaid and other existing HHS programs are already providing support for early intervention services for handicapped infants and toddlers.

Ms. WILL. They are providing health services for some children.

Senator WEICKER. Your statement, you say we are proposing full rescission for the grants for Infants and Family Program. Not requesting any funds for this program in fiscal year 1988.

You have two major concerns about the program. You give your first, limited resources. In general the Federal Government assists States in providing such services on the basis of low-family income. Second, a number of programs already exist to provide funding for services to these children and their families. These include Medicaid and other programs administered by the Department of HHS.

Yet here in your testimony here today you said you are not sure as to what was being supplied by HHS. In other words you are justifying a zero funding in your document on the basis of what is supplied by another agency. And yet here today you tell us you do not know what it is that is supplied by that agency.

Ms. WILL. I am justifying our decision on the basis that we do not have information. One of the main problems is that we cannot define these services.

What are educational services, Senator, for a 0- to 2-year-old infant or toddler? We are not sure. One of the problems in drafting the regulations is that we have the term developmentally delayed, which will be defined by the States and could be defined differently by each State. That makes it difficult for us to predict the size of the population or know its needs.

Other health-related services is another term that we have to define. That is a very large——

Senator WEICKER. Please understand, this is not the same question that I asked the Secretary yesterday. Yesterday I was concerned about the delay in funding of the program.

My remarks are directed to you on the zero funding of the program. Those are two different things.

Ms. WILL. There is no delay.

Senator WEICKER. You are justifying a zero, the delay item we have addressed. These funds will be coming along. I want to know how you justify a zero funding, when indeed you do not know what is going to replace it, or what can replace it by virtue of existing programs, by your own statement.

Ms. WILL. Because we have even less information than other agencies, and we do not have enough information about which other funding streams are available, we have an enormous void of information about the zero to 2 population, its needs, its size, the kinds of services, what the States are doing if anything, what localities might be doing——

Senator WEICKER. Let us set this into its proper context. Both you and I know very well that we know a great deal about early intervention at this juncture. This statement would have been fine about 10 years ago.

But we now have a learning curve. We have a track record, if not by a Federal program, but by those programs that were conducted either in a pilot sense or privately or whatever.

The President of the United States, your boss, signed this into law less than 1 year ago. I assume he signed it into law less than 1 year ago because he felt the time had come to move in this direction.

Now what you are telling me, and you are the advisor to the President of the United States, is you should not have signed the bill or the law. Is that right?

Ms. WILL. No; I am not.

Senator WEICKER. Well, once the law is signed do you think it is fair to expect that we are going to implement the law?

Mr. CARNES. We are, in fact, going to implement the law.

Senator WEICKER. With a zero funding. You certainly cannot implement it with anything else in the scene because by the administration of the Assistant Secretary she does not know what is going to replace it, supplant it, and do the same job.

So I can understand, if she would turn to me and say, Senator, there is a program under HHS that does exactly the same thing that early intervention provides for. She does not know that.

Mr. CARNES. We do know this. We do know that approximately $2.6 billion is provided in services to these children. What we do not know, as we discussed yesterday, is the comprehensiveness of those services.

Senator WEICKER. I can assure they do not entail early intervention for these infants and toddlers.

Mr. CARNES. Well, they——

EDUCATIONAL SERVICES

Senator WEICKER. No, it does not. It is not out there. Because I can assure you, and Madeleine knows it, there is nothing out there that does this job right now. There might be services available in a medical sense, I am not denying that, in this $2.2 billion. But nothing in an educational sense.

Mr. CARNES. There is certainly little at the Federal level in an educational sense. Yes, sir.

Senator WEICKER. And the point that we are trying to make, the point that we tried to make in this legislation, is in this particular instance, the educational program, in effect, achieves a medical result. And that is the reason why it is in your Department.

Mr. CARNES. Ms. Will has pointed out that right now we are not sure even of the exact size of this population or of the nature of their needs. We do have a study underway to assess that.

My presumption is that on the basis of the results of that study, we would seek funding for this program. But at this point we have no basis upon which to do so, no knowledge base upon which to make funding decisions in the program.

Senator WEICKER. Let me assure you, you are going to have the funding for the program, this year. You will not have to wait 1 year.

Mr. CARNES. I suspected that.

Senator WEICKER. Yes; you also state, Madeleine, that given limited Federal resources we questioned whether it would not be better to focus this new program upon those most in need, such as the poor and the severely handicapped.

Please answer me the question as to why should handicapped infants be treated differently than school age handicapped children who are eligible for services under Public Law 94–142?

Ms. WILL. Senator, we raised that issue because there was a fair amount of confusion, as I mentioned earlier, with respect to the kinds of services that are going to be provided. Some are health services, medical services. Some are education service, but how we define those is unclear.

It is the case that in health and human services, medical services are distributed on a means test basis. So we were raising a question about whether Congress wanted to look at this issue, to review it and give us guidance.

TARGETING AVAILABLE RESOURCES

Mr. CARNES. I would certainly suggest, if I could, Senator, that at this level of funding, in our opinion, these kinds of priorities ought to be established. That, in fact, at this level of funding we ought to target the money on those with the greatest financial need.

Senator WEICKER. In this area, quite frankly, it does not make any difference as to what the financial need is. It is the physical and mental condition that is the determinant. Not the family income.

Mr. CARNES. I do not think the resources available, either in this appropriation or in what you might appropriate in fiscal year 1988, would be sufficient to meet all those needs.

Senator WEICKER. Well, it was not, because I would be glad to get into this. It was not, because as a result of very hard negotiations with the administration to get their agreement to sign this bill into law, and also with my colleagues over in the House, this was considered the appropriate level of funding.

And there had to be give and take. I grant you, $50 million was inadequate. We said it was inadequate to start. We felt it important at least to get started. So that only goes to prove the other point that I have made. This was not something dreamed up by the Congress. There was a long track record, albeit with the negativism of the administration, which was expressed throughout the negotiations.

At the final meeting of minds here, the administration was included, the President agreed he would sign the bill, and there we were. So nobody is going to argue the fact that the funding level is inadequate. But please do not tell me if it is inadequate at $50 million that somehow zero is going to go ahead and be even better.

Mr. CARNES. I was not trying to tell you that. What I was trying to say is that at the funding level at that amount, that the appropriate way to spend the funds would be to target them on those with the greatest need.

TRIO PROGRAMS

Senator WEICKER. One last question for Madeleine, and then, Mr. Chairman, I will be glad to turn it back to you.

Incidentally, let me say one thing, while he is out of the room. If you think you are going to win with Senator Chiles on TRIO, you are not. Because, I will tell you why, when I was chairman of this subcommittee, and I chaired it. I did not win against Senator Chiles on this issue. [Laughter.]

He fought like, no man deserves more credit in the United States than does Senator Chiles for the TRIO Program. And he was right. I was wrong. He was right. He is going to be right again, I can tell you that. [Laughter.]

SPECIAL EDUCATION PERSONNEL DEVELOPMENT

The Department has requested a reduction of $11 million from special education personnel development for fiscal year 1988 from a fiscal year 1987 appropriation of $67.7 million. In your justification you state this as part of a 2-year strategy to reduce funding for this purpose down to $40 million.

Now I have a 1986 status report on personnel to educate the handicapped in America. The quote from this report, I am now quoting, it seems clear that the demand for personnel remains significantly greater than the available and projected supply, end of quote.

Indeed, one of the areas of personnel shortages mentioned is the area of early childhood. This report was prepared before the new legislation was passed by Congress last year. For example, the report states that in Connecticut, which is by no means the exception, there is a need for additional personnel in all areas of special education, in Florida, quote, there are critical shortages in the areas of emotionally handicapped, speech, language, occupational, and physical therapy, end of quote.

Given this information from these statistics, how can you justify your long-term strategy to reduce Federal support for special education personnel development?

And let me, I will warn you ahead of time, so do not blow your head off. Please do not give me the answer that I got at the outset of this administration which is, well, we have a surplus of teachers, therefore, we can just take the surplus of teachers and they can go into special education. These are two distinct professions. Believe me.

So I would like to know how you can justify the long-term strategy to reduce the Federal support for special education personnel development?

SHORTAGE OF SPECIAL EDUCATION TEACHERS

Ms. WILL. Senator, we do not dispute that there is a shortage of teachers, special education teachers. Our funding request is based on a concern that we do not know how our funding correlates with reducing the shortage. We do not know how to use our money to help the States to reduce that shortage.

We have information that I think 274,000 teachers, special education teachers, were hired in 1984 and 1985. But we also know that one-quarter of the teachers prepared in special education either do not go into teaching at all or do not wind up in special education.

There are many factors beyond our control that influence the teacher shortage, such as economic circumstances and State certification requirements, a number of things that are beyond our control.

We are trying to collect more data on the shortage. We also have a center on recruitment which is going to advertise information about needs in special education. We are also trying to target the universities. We are trying to focus on the needs of the individual States and to encourage the universities in the State and the State education agencies to work together, to work more closely.

In fact, we are working on a grant announcement, in which we call for proposals jointly developed by universities and States to target their very individual State problems.

Senator WEICKER. Well, do you have a copy of this report?

Ms. WILL. Yes.

Senator WEICKER. Well, I would suggest that you make it available to your own staff.

Now admittedly, this is a survey by the Institute for the Study of Exceptional Children and Youth, Department of Special Education, College of Education, at the University of Maryland. And I will admit that it is clear to me just from these credentials that this is part of the teacher education establishment, Mr. Finn. Better watch out about this. [Laughter.]

Might have had some background in education. But in any event, what bothers me, Madeleine, is that you say, you do not know about this business of personnel and special education. You do not know about special intervention, early intervention, you do not have the statistics, you do not have the facts and the figures.

Well, No. 1, you are not going to kid me. You do know. You are, as a matter of fact, I am very proud of you in the sense of, you have

plenty of background knowledge. You are no fool in this matter. You are an expert as Mr. Finn would like to see, as a lay person, that has been involved long before you came to the Department.

I think all of us do not know but this is merely an excuse for the fact that we do not want to spend the money. Well then say you do not want to spend the money, from a budgetary point of view. Never mind the humane point of view, it is a foolish thing because the numbers we are talking about are going to save us billions in the long run.

But I would suggest that if indeed so many people do not know in your Department, what is your Department? What is your official title here? Assistant Secretary for Special Education and Rehabilitative Services? Do you have some people in this Department that know something about special education?

Ms. WILL. Yes; I do.

Senator WEICKER. Put them to work.

Mr. CARNES. Just one point if I could, Senator. Whatever the dollar level that is appropriated for the training of personnel in special education or in rehabilitation services, I think we cannot ignore the fact that up to one-quarter of them, one-quarter of the people who are trained in special education do not even go into that field.

INCREASED STATE INVOLVEMENT

But beyond that I would make this additional point. What we would like to see happen is to have the States get the money, a greater share of the money, themselves so that they can meet their own State needs, rather than having us try to micro manage this program to meet the needs of particular communities or particular towns or counties throughout the United States.

Senator WEICKER. Are you saying that you will have the States provide the money?

Mr. CARNES. No; we would like to take the funds that we get and target more of them to the States so that the State can allocate the resources. The State can make its own assessments, and it can manage its own resources and needs better than we can.

FEDERAL STANDARDS

Senator WEICKER. Well, let me tell you again and I do not expect you, as I said before, you have got a lot to oversee. But let me just give you a little bit of history.

Very briefly, the States have done a rotten job of this over the years. They just have not come up to the mark. And unless the Federal Government is the one to set the standards and insist on performance, it is not going to be done.

I can speak, the State of Connecticut, premiere in the United States, when I was in the State legislature 20 years ago, before there were Federal standards, the rest of the country is in bad shape. Well, thank God Federal standards came along, because right now the State of Connecticut is in wretched shape, when it once used to lead the Nation.

There is no political constituency here, Bruce, to go ahead and drive this kind of funding or this kind of legislation. The numbers are not there. These unfortunates do not vote. That is the problem. That is why you and I have got to take up that slack. And do not look to the States either to supply the money or the expertise. They are not going to do it.

Ms. WILL. Senator, you are not talking about the Connecticut special education system, which is very good. You are talking about the institutional——

Senator WEICKER. I am talking about the fact that, that is correct, you are absolutely correct. But I am also saying that in every phase of treatment of the handicapped, my State used to lead all the rest. And we have got some serious deficiencies now, and indeed it is the Federal standards that are making us come up to certain standards.

Were those standards not there, those Federal standards not there, I do not know where we would be. But the reason why I used the example of Connecticut is because I do not want to be sitting here pointing the finger at everybody else. I am perfectly willing to take it on my own head as to what is going on in my own State.

I just do not want to give the impression that either the money will come from the State, as I say, or the direction will come from the State. We know that in both these senses, the motivator, the driving force is politics. It is votes. And there are no votes in this business. Period. There are none. Not when it comes to slicing up the pie, believe me.

PRESCHOOL PROGRAM AWARDS

Senator HARKIN. I just have a couple of questions, Ms. Will. As you know, funds appropriated in fiscal year 1987 for preschool programs for handicapped children are to become available on July 1 of this year.

Please describe the steps you are taking to ensure that these funds are, in fact, made available on July 1.

Ms. WILL. We are in the process of developing application packages for the Preschool Program. They will be mailed to the States in mid-May. We expect proposals back from the States at the end of June, and then we hope to make awards as soon as possible after July 1, when the money is available.

My office has prepared 27 regulations packages this year. Seven of them are in final clearance and the rest are to follow. We are very comfortable with what we have been able to accomplish with respect to the reauthorization of the Rehabilitation Act.

Mr. CARNES. The application forms for the Preschool Program are on track. They are in final clearance now. They will be available in May. We will have the applications in June, the awards in July.

Senator HARKIN. We talked once before about the regulations. I understand they are coming out. I am more concerned with the process of how you are going to make sure those funds do get out.

Mr. CARNES. I am not sure then that I follow the question about the process.

DELAYS IN MAKING PRESCHOOL AWARDS

Senator HARKIN. Are there any factors that could result in a delay in the availability of this money?

Mr. CARNES. Not at this point. We do not foresee any. We have developed a package. It is on its way over to OMB and we expect it to be cleared and the applications out within 3 weeks.

Senator HARKIN. Do you see any factors that could delay——

Mr. CARNES. No.

Senator HARKIN. No; I'm not talking about the regs. I am talking about the funds to be available after July 1.

Mr. CARNES. Right.

Senator HARKIN. That is what you are talking about too?

Mr. CARNES. Yes; I am saying that it is on schedule. I have no reason to believe that the schedule is not going to be followed. Those funds will be available, and the grants will be made in July.

Ms. WILL. We have contingency plans and so we are very comfortable with where we are. The funds will flowthrough the State agencies, from there to the local agencies. It is, in fact, 75 percent of the funds.

Senator HARKIN. You think it is right on track, and you will have the funds available?

Mr. CARNES. I am not in possession of any information that would lead me to think that it is not on track. The last status report, as of a couple days ago, was that it is on track and the money will be out on time.

Senator HARKIN. It is my understanding that the Preschool Program will have two objectives. One is to reward the States who currently serve preschoolers. The other is to provide an incentive to States to serve some 80,000 preschoolers who are currently unserved.

Is it not true that under your proposal there would be enough funds to reward the States currently served and provide no money at all to the States as an incentive to reach out to get the other 80,000?

Mr. CARNES. The $3,800 bonus payment, under our proposal, would be eliminated. It is a bonus payment for children who are not yet being served.

Senator HARKIN. That was 80,000 as I understand.

Mr. CARNES. The rationale here is that the bonus initially awarded on the basis of an estimate is going to produce wild funding balances and skews in funding levels between the States. The mechanism is very cumbersome.

The States will estimate the money they get. Estimate the number of kids they serve. They provide that count to us. We put out the money. In all likelihood, one-half the States will be up and one-half the States will be down the following year when actual numbers are reported. We will have to take money away from States the next year, according to the statute.

We do not object to providing funds on the basis of the number of kids actually served. But providing funds, $3,800 per kid, on the number of kids who may be served, we think, is an inappropriate way to go.

Senator HARKIN. The States are the ones that came up with that.

Mr. CARNES. Well, we still think that both budgetarily, from the Federal point of view, and also in terms of program administration, it is incredibly cumbersome. You have created then another back and forth between the States on the funds.

Probably one-half the States will be refunding money to the Federal Government under this provision.

Ms. WILL. The bonus idea was based on States projecting how many kids were going to be served. What we are questioning is their ability to do that projecting accurately.

We are not comfortable with the mechanisms, and as Bruce indicated, we are concerned about the States getting a large grant one year and then our having to tell them the following year that they wildly overestimated and we have to take back funds.

Senator HARKIN. So what you are basically saying is that we have got to fulfill the first objective, to serve the present preschoolers. But the other 80,000 that I understand are on the waiting list you are not going to fund.

Ms. WILL. We think the $600 incentive that we are providing is a large one and will motivate States. Before this law passed, we had seen a jump——

Senator HARKIN. How much is it? $600?

Ms. WILL. $600 per child as an incentive. We had seen the Preschool Program go from 263,000 children served to roughly 285,000, just on the basis of the preschool incentive grant funds that we had been providing. We view the $600 incentive as significant. We think it is enough money to influence the States to stimulate effective program involvement.

LIBRARY CARD CAMPAIGN

Senator HARKIN. That is all I have, Mr. Chairman.

Senator WEICKER. One brief question. I notice in the book put out by Secretary Bennett, "First Lessons," that on the matter of libraries, and children should belong to the public library. There is one within striking distance of practically everybody.

Let us have a national campaign. By the end of the 1986–87 school year, every child should obtain a library card and use it. And then you people go ahead and zero fund the access to libraries. I mean, I do not understand this kind of rhetoric. What a great pamphlet. You just get out this little book and that is a substitute for the whole library system.

Mr. FINN. Senator, the campaign is underway. The American Library Association and the National Commission on Libraries and Information Science have that every child with a library card campaign underway right now.

Senator WEICKER. Yes; while you are doing the campaign to give them a library card, you are going to make darn sure there is no reason to go ahead and use it by the time you are through.

Mr. CARNES. Senator, we do not provide——

PUBLIC LIBRARY SERVICES

Senator WEICKER. You have got zero funding now for public library services. The purposes of this program, by extending access to public library services in areas that are without services, or in which these services are inadequate, make library services more accessible to persons who by reason of distance, residence, physical handicap are unable to receive public library service.

Look, all I am saying, and this is quite consistent, as I said before, except that I am not going to let it pass by on my watch over here. You can give all the rhetoric the United States can swallow hook, line, and sinker. But the United States ought to look at your budget request. That is what calls the tune. Not whether we have a campaign out there telling everyone to go out and get a library card.

Senator HARKIN. Excuse me, Senator Weicker, will you yield a second.

Senator WEICKER. Yes.

Senator HARKIN. Where in the States are you from, Mr. Carnes?

Mr. CARNES. My father was in the military. I have lived in many States.

Senator HARKIN. I just heard you say under your breath that what the Federal Government provides in library service is a mere pittance.

Mr. CARNES. Yes, sir.

Senator HARKIN. Well, I happen to have a home in Fairfax County, where we have great libraries. It happens to be a very wealthy county. A lot of very wealthy people live there.

But you go out to Iowa, to some of those small towns, and as I am sure it is in Florida or even Connecticut, that mere pittance that you just talked about is the difference between a library being open at decent hours, so that people can actually use it, or actually closing its doors and maybe operating just a few hours a day.

That is the difference. It may be a mere pittance as you say, and maybe Fairfax County can do without it. But those small towns and communities cannot do without it. Because that means that their library is going to be closed on the weekends.

QUESTIONS SUBMITTED BY THE SUBCOMMITTEE

Senator CHILES. We have got 1 minute left on the vote. I think we are ready to recess, Mr. Carnes. And we will hear from the special institutions as soon as I get back.

There will be some additional questions that we will submit for you to answer for the record.

[A brief recess was taken.]

[The following questions were not asked at the hearing but were submitted to be answered for the record:]

EDUCATION FOR THE HANDICAPPED

QUESTIONS SUBMITTED BY THE SUBCOMMITTEE

ZERO REQUEST FOR NEW CONGRESSIONAL INITIATIVES

Question: Mrs. Will, in my review of the 1988 budget, I've been distressed to find the administration backpedalling on commitments it made last fall. The President signed the anti-drug abuse act with great fanfare, then proceeded to slash his budget request to carry it out. The same thing seems to be happening in the Education budget for the handicapped.

Mrs. Will, the Department has not requested funding for the new Grants for Infants and Families program, which was created by Congress last year, under the guiding hand of Senator Weicker, to help States provide services to handicapped infants and toddlers.

I understand that you do not dispute the value of these early intervention programs. But you argue that providing services to younger handicapped children is not an appropriate role for the Department of Education. Is that correct?

Answer: Yes. We do not doubt the efficacy of such services, but we have serious reservations about the program that has been enacted. We believe that, unlike other Education of the Handicapped programs, the program would provide primarily health and social services, rather than educational services. Many such services are already being provided to this population through programs administered by the Department of Health and Human Services. We also believe that the provision of these services should be targeted upon those most in need, such as the poor and the severely handicapped. As we have pointed out in the past, we are particularly concerned about the fact that there is little information regarding the population to be served, the kinds of services that are required, and what funding sources now exist to provide services to this population.

EDUCATION-RELATED SERVICES FOR INFANTS AND TODDLERS

Question: We hear from parents of very young handicapped children that they can't find appropriate education-related services for them. But you indicate that the Department of Health and Human Services already operates such programs. What are they?

Answer: The Division of Maternal and Child Health and the Administration on Developmental Disabilities provide funding for education-related services. Both offices provide services to handicapped children from birth through State grants and discretionary programs.

The Division of Maternal and Child Health has an Early Intervention Program for children from birth to three years of age that is designed to plan, develop, implement and institutionalize appropriate health and education services for children with and at risk for disabling conditions and chronic illnesses. Project Zero to Three, a grant to the Center for Clinical Infant Programs, provides a mechanism for selected States to improve services for at-risk and disabled children who are under age three and their families.

The Administration on Developmental Disabilities includes child development services as one of the Federal priority areas for which States may use their State grants. During fiscal year 1985, 33 States selected this priority. According to the fiscal year 1985 Annual Report, several States used their State grants to improve early intervention services. States may also use their protection and advocacy funds to serve infants and toddlers. In fiscal year 1985, almost three percent of those served under the Protection and Advocacy program were under age four. The University Affiliated Facilities Program also provides services for infants and toddlers. In fiscal year 1985, exemplary services of a diagnostic, therapeutic, educational, habilitative and vocational nature were provided to 62,421 disabled persons under the program. Early intervention services were among the services provided to 46,681 children and youth under this program in fiscal year 1985.

1987 APPROPRIATION

Question: The Department's statement for the record asserts that the 1987 Education for the Handicapped appropriation is "too high." This seems to imply that more funds were provided than can be used, when, in fact, they provide only a slight increase in the small Federal share of the cost of educating a handicapped child. Since States are required by law to educate handicapped children, doesn't a budget cut in this program merely result in a cost shift from the Federal Government to the States rather than in any real deficit reduction?

Answer: Education, including the education of handicapped children, is primarily a State and local responsibiltiy. The 1987 appropriation shifts some of the fiscal responsibility for special education from State and local governments to the Federal Government. This will unnecessarily increase the already rapidly growing Federal deficit. Many State and local governments choose to operate with balanced budgets or without rapidly expanding deficit financing. We do not believe that the Federal deficit simply replaces State and local deficits.

STATE SERVICES TO HANDICAPPED INFANTS AND TODDLERS

Question: How many States presently provide services to handicapped infants and toddlers?

Answer: Seven States provide services to all handicapped children from birth and one State provides services to all handicapped children beginning at age two. Several other States mandate services from birth for children with specific severe handicaps such as blindness, deafness, and autism.

PRIVATE HEALTH INSURANCE FOR HANDICAPPED CHILDREN

Question: As part of its justification for zero-funding the grants for infants and families program, the Department states that private health insurance is available to cover these costs. What data does the Department have regarding the extent of private insurance coverage for services for handicapped children, particularly infants and toddlers?

Answer: The Employee Benefit Research Institute has found

that 10.8 percent of all children under 14 years of age and those 14 to 18 who are nonworking dependents are without health insurance. Of the 89.2 percent of children covered by either a private or public health insurance plan, 61.9 percent are covered through an employer-sponsored health plan. This coverage includes handicapped infants and toddlers.

Question: What proportion of households with handicapped children have acquired this insurance coverage?

Answer: There are no data available regarding the proportion of households with handicapped children that have acquired private insurance coverage. The information provided above is based on the general population. We assume that households with handicapped children are represented in proportion to their representation in the general population.

TELEVISION CLOSED CAPTIONING

Question: What proportion of the cost of captioning is financed by commercials?

Answer: To the best of our knowledge none of the closed-captioned network programs is financed by commercials.

Question: Are captioned films available on videotape for rental or purchase?

Answer: Closed-captioned video cassettes are available for sale or rental from the movie and videotape industry. No Federal funds are used for this purpose. These cassettes cover a variety of subjects such as popular feature films, children's stories, documentaries, do-it-yourself projects, and fitness workouts.

LONGITUDINAL STUDY OF CHILDREN LEAVING SPECIAL EDUCATION

Question: What funding is requested in 1988 for the longitudinal study of children leaving special eduation that was mandated in the 1983 amendments?

Answer: In fiscal year 1988, the second year of the longitudinal study of children leaving special education will be funded at a level of approximately $1,500,000.

Question: Has the Department released any preliminary findings from the study?

Answer: The Department has not released any preliminary findings from the study. Data collection has just begun. Preliminary findings should be available in the summer of 1988.

SPECIAL EDUCATION PERSONNEL DEVELOPMENT

Question: The Department justifies its requested reduction in funding for special education personnel development, in part, by indicating that other funds are available to train special education teachers. Please identify these funds.

Answer: Funds are available from several student aid programs

to support higher education in the United States. In addition, up to 25 percent of the funds available to States under the Grants to States program may be used by States for a variety of purposes including training.

Question: What data does the Department have regarding the current supply of special education teachers and regular teachers with special education training?

Answer: The most recent information that we have regarding special education staffing is for school year 1984-85. In that year, there were 274,519 special education teachers employed and 226,021 teachers aids, therapists and other staff providing services for handicapped children. We do not know the number of regular education teachers with special education training providing services.

Question: Doesn't the newly-authorized grants for infants and families program create a need for additional training?

Answer: As grant funds become available to States for serving handicapped infants and their families, there is likely to be a greater demand for adequately trained personnel. However, we do not yet have adequate information regarding the extent of participation in the new grant program, the numbers of additional personnel required, or the amount of additional training which may be needed for personnel serving this population.

UNOBLIGATED BALANCES

Question: What accounted for the $133 million unobligated balance under the Education for the Handicapped account, which was carried over to fiscal year 1987 from fiscal year 1986?

Answer: About one-third of this amount was Architectural Barriers Removal funds for which States had not yet submitted applications before the end of the fiscal year. The remaining two-thirds of the unobligated balance was in the Grants to States and Preschool Grants programs. These obligations were delayed pending approval of State plans.

Question: How is this money being spent in fiscal year 1987?

Answer: All of these funds will be obligated in fiscal year 1987 in the program areas for which funds were originally appropriated.

STATUS OF REGULATIONS

Question: What is the status of regulations being developed pursuant to P.L. 99-457, the Education of the Handicapped Act Amendments of 1986?

Answer: Of the 18 new or revised regulations developed as a result of the Education of the Handicapped Act Amendments of 1986, three have been published. Fifteen are under review and will be published as soon as the review is completed.

STATE GRANT PROGRAM

Question: You state in budget documents that your request for the Education of the Handicapped State grant program is an increase of 8.5 percent per child over the fiscal year 1986 level. Is this increase totally attributable to inflation costs?

Answer: Yes. Our fiscal year 1988 request, which represents an increase of 8.5 percent per child over the fiscal year 1986 level, maintains services by offsetting the effect of inflation.

AVERAGE PER PUPIL EXPENDITURE

Question: Didn't fiscal year 1986 State grant funding represent the lowest percent of the national average per pupil expenditure (APPE) since the program began?

Answer: No. The Federal share of the APPE for fiscal year 1977 was 5 percent.

Question: What percent of APPE is represented by your fiscal year 1988 request?

Answer: Our fiscal year 1988 request represents 8.4 percent of the APPE.

STATE GRANT PROGRAM CHILD COUNTS

Question: Why are your counts of children served under the Education of the Handicapped State grant program estimated to be the same as fiscal year 1986 through fiscal year 1988, or the school year 1988-1989?

Answer: The total number of children counted by States for State Grant funds grew at a declining rate of increase during the past several years. In fiscal year 1986, the total number counted declined by approximately 2,500 from fiscal year 1985. Our fiscal year 1988 request assumed that the fiscal year 1986 child count indicates that the total number of children counted by States has stabilized and will not continue to increase.

LEARNING DISABLED CHILDREN

Question: What proportion of children served under the Education of the Handicapped State grant program are learning disabled? Has this proportion changed over the past few years?

Answer: For school year 1985-86, States and insular areas reported a total of 1,847,591 children aged 3 through 21 with learning disabilities who were served under the State Grant program. This figure represents approximately 45 percent of all handicapped children aged 3 through 21 served under this program. For school year 1982-83, learning disabled students represented approximately 43 percent of all children served under the State Grant program. For school years 1983-84 and 1984-85, they represented approximately 44 percent of all children served. The proportion of learning disabled children reported served under the State Grant program in school year 1985-86 increased by approximately 2 percent over the past four years.

Question: What is the Department's view of research indicating that some less seriously handicapped children, such as learning disabled, may benefit from participating in regular education classes with supplementary aid rather than being in special education?

Answer: We believe that the results of this research can improve the quality of education for mildly handicapped children, including those children who are learning disabled. As we reported in the 1987 Annual Report to Congress, the great majority of students with learning disabilities spend a major portion, if not all, of their school day within general education classrooms. Therefore, it is important that we encourage research and disseminate findings regarding strategies to improve the coordination between general and special education in educating these students and to provide general education teachers with strategies and support that allow them to meet the individual needs of students. We are attempting to do this through our General Education Initiative. For example, projects funded under the Innovation and Development program and the State/Federal Evaluation Studies program are studying and documenting the effectiveness of such strategies. This information will be shared with State and local education agencies and other interested parties as it becomes available.

SANCTIONS FOR NONCOMPLIANCE

Question: When you conduct compliance reviews under the Education of the Handicapped State grant program, what sanctions do you impose on agencies found out of compliance?

Answer: Thus far, we have not found it necessary to impose sanctions other than the requirement that the States draft and submit corrective action plans in each of the areas in which noncompliance was found.

COMPLIANCE PROBLEMS

Question: What areas of compliance appear to have consistent problems?

Answer: In fiscal year 1986, we focused on three areas: (1) the requirement that State educational agencies maintain general supervision of all special education programs in the State; (2) the requirement that students be educated in the least restrictive environment appropriate to their needs; and (3) the requirements governing State monitoring of local programs. Our monitoring reports indicate that problems in these three areas are common, although the specific nature of the issues for each of these areas differs from State to State. To varying degrees, improvements are needed in most States in these areas.

STATUS OF MONITORING GUIDELINES

Question: What is the status of monitoring guidelines that were being developed by the Office of Special Education Programs last year?

Answer: The initial draft of the monitoring guidelines was disseminated at the National Association of State Directors of

Special Education (NASDSE) fall 1986 conference for review and comment. The suggested revisions and recommendations from NASDSE and other organizations are currently under consideration by the Office of Special Education Programs. We expect a final document to be completed by the summer.

SECRETARY OF THE INTERIOR APPLICATION FOR A STATE GRANT

Question: Has the Secretary of the Interior submitted an application to receive an Education of the Handicapped State grant as required by P.L. 99-457?

Answer: No, the Secretary of the Interior has not yet submitted an application for a State grant.

EVALUATION ACTIVITIES FOR SCHOOLS SERVING INDIANS

Question: What evaluation and monitoring activities are planned for elementary and secondary schools serving Indian children?

Answer: As mandated by the Education of the Handicapped Act Amendments of 1986, we are undertaking a study addressing the provision of a free appropriate public education to special populations, including Indian children with handicaps. Within the next few months, we will award a contract to access existing data bases and sources of information. The contractor will work with appropriate organizations and agencies to supplement, as necessary, this information. In addition, the contractor will provide in-depth information regarding the barriers to providing effective services for special populations and will recommend strategies for overcoming these barriers. The study findings will be summarized for each of the special populations, including Indians, in the 1989 Annual Report to Congress. After this study has been completed, we will determine what additional evaluation and monitoring activities should be undertaken for elementary and secondary schools serving Indian children.

PRESCHOOL GRANTS

Question: What is the current status of State policies mandating services to handicapped preschoolers ages 3 through 5?

Answer: Currently, seven States and four territories mandate services for all handicapped children from birth. One State mandates services beginning at age two. Eighteen States and one territory mandate services beginning at age three. Three States mandate services beginning at age four.

The States and territories mandating services to all handicapped children from birth are: American Samoa, Guam, Iowa, Maryland, Michigan, Nebraska, New Jersey, Oregon, Puerto Rico, South Dakota, and the Trust Territories of the Pacific. Virginia mandates services for all handicapped children beginning at age two.

The States and territory mandating services for all handicapped children beginning at age three are: Alaska, California, Connecticut, District of Columbia, Hawaii, Illinois, Louisiana, Massachusetts, Minnesota, Montana, New Hampshire, North Dakota, the

Northern Mariana Islands, Pennsylvania, Rhode Island, Texas, Utah, Washington, and Wisconsin. Delaware, Oklahoma, and Tennessee mandate services for all handicapped children beginning at age four.

Question: What do you expect will be the impact of the new preschool grants authorized by P.L. 99-457 on such policies given your budget levels for the program?

Answer: We believe that our proposed budget level, which provides a total of $625 for each three through five year old served through the Preschool Grants and the Grants to States programs, will be a sufficient incentive to encourage States to serve these children. We expect that States will significantly increase the number of three through five year olds served and that most, if not all, States will mandate services for these children by fiscal year 1990.

Question: Is your estimated increase of 22,000 in the number of preschool children served in fiscal year 1988 over fiscal year 1987 attributable to the new Federal preschool grant program requirements or demographics?

Answer: The increase is based on our analysis of the total number of unserved handicapped children aged three through five. We estimate that there are approximately 73,000 unserved preschool children, of whom one-third would be served by fiscal year 1988, or approximately 24,000 children. We estimate that 2,000 previously unserved children would be served in fiscal year 1987 and that 22,000 additional children would be served by fiscal year 1988.

PRESCHOOL GRANTS

Question: Do you think that such a significant increase in children served implies a Federal responsibility to provide some additional funding for "start-up" expenses?

Answer: No, we do not agree that there should be additional funding for "start-up" expenses. Children counted under the Preschool Grants program are also counted for funding purposes under the Grants to States program. Therefore, the Federal share will be $625 for each three through five year old served. We believe this provides adequate incentive for States to serve handicapped preschoolers.

Ouestion: What do you anticipate will be the effects of the increases in Federal funding for preschool programs for handicapped children on State and local expenditures for such children?

Answer: We anticipate that the mandate that States serve all preschool children with handicaps, which has been accompanied by significant increases in Federal funding for the Preschool Grants program, will result in increased State and local expenditures for these children. We anticipate that States and localities will commit themselves to developing the required systems for service delivery for these children and will bear the attendant costs.

Question: Do you have any estimates of State/local funding for programs for this age group versus Federal expenditures?

Answer: In June 1988, we will have completed a study of special education expenditures that will provide some information on preschool expenditures for special education students. Since preschool services were not mandated in all localities, the information obtained in the survey will be limited.

Question: When will proposed regulations for the preschool grant program be issued and when do you anticipate they will become final?

Answer: The Notice of Proposed Rulemaking for the Preschool Grant program will be published this June. Final regulations will be issued in October.

Question: How will the fiscal year 1987 funding for the program for "additional children," which may total up to $3,800 per child, be allocated?

Answer: These funds will be allocated on the basis of State estimates of the number of previously unserved three through five year olds expected to be served under the EHA during the 1987-88 school year. Funding will be based on the number of additional children exceeding the total number of children served the previous year under the EHA State Grant and the Chapter 1 Handicapped programs.

Question: What problems do you anticipate with this new allocation mechanism for the Preschool Grants?

Answer: We anticipate that many States will have difficulty in arriving at reasonably accurate estimates of the number of additional children expected to be served and in identifying the local education agencies and intermediate education agencies where these increases will be found. We anticipate that poor estimation will result in significant changes in funding levels for a number of States as adjustments based on actual counts are made. As a result, we expect that many States and local educational agencies are likely to have problems in administering the Preschool Grants program.

GRANTS FOR INFANTS AND FAMILIES

Question: You request no funding for the new grant program for handicapped infants and toddlers authorized by the Education of the Handicapped Amendments of 1986 because little information is available on the size and nature of the population. What measures will the Department of Education take to see that such information is obtained if this particular program is not funded?

Answer: We expect that some information about the size and nature of the handicapped infant and toddler population will be obtained through the study of Federal funding sources and services which was mandated by the Education of the Handicapped Act Amendments of 1986. After this study has been completed, we will determine what additional information is needed and how to obtain it.

Question: In what ways is the authority for the new grant program for services to infants and toddlers unnecessarily prescriptive, as you contend in your budget justification?

Answer: We find the program unnecessarily prescriptive because it establishes numerous requirements which all States must follow in developing and implementing a system for providing early intervention services. For example, States must establish timetables for ensuring that appropriate early intervention services will be available to all handicapped infants and toddlers in the State before the beginning of the fifth year, must develop a public awareness program focusing on the early identification of handicapped infants and toddlers, must identify and provide for the coordination of all available resources within the State from Federal, State, local and private sources, and must develop a system for compiling data on the number of handicapped infants and toddlers and their families in the State in need of appropriate early intervention services, the numbers of such infants and toddlers and their families served, and the types of services provided. We believe that States may find such requirements burdensome and that the program does not provide States with adequate discretion to develop programs to fit their unique needs.

CONTINUUM OF SERVICES

Question: What is the Department's view of the advisability of the Federal Government, through the Department of Education, promoting a continuum of educational and related services for all handicapped children from birth through age 21 years?

Answer: We believe that a continuum of services should be available for children from birth through 21 years of age. The Department has an important role in ensuring the provision of selected educational and related services within this continuum. However, some of the services required by handicapped children are not special education or related services. For example, early intervention services for children birth through 2 years of age are primarily medical, health, and social services, not educational services. In addition, it should be emphasized that a continuum must be supported and promoted by a wide variety of Federal, State, local, and private agencies.

SERVICES TO HANDICAPPED INFANTS

Question: Are services to handicapped infants primarily the responsibility of health or education agencies?

Answer: Since handicapped infants receive primarily medical, health, and social services, we believe services to these children are the responsibility of health and social service agencies. A recent study funded by the Office of Special Education and Rehabilitative Services indicates that States consider services to these children to be the responsibility of health agencies. The study found that States most frequently identified their public health agency as the lead administering State agency for services to handicapped children from birth through age two. The State human or social service agency or the State education agency was the second most frequently identified lead administering agency.

STATUS OF REGULATIONS FOR GRANTS FOR INFANTS AND FAMILIES PROGRAM

Question: What is the status of regulations being developed to implement the new program for handicapped infants and toddlers?

Answer: The Notice of Proposed Rulemaking for the new program for infants and toddlers under Part H of the Education of the Handicapped Act will be published by late spring. Final regulations for this program will be published by October 1, 1987. Draft application packages were mailed on May 5, 1987 to all States and Insular Areas.

FISCAL YEAR 1987 ALLOCATION FOR INFANTS AND FAMILIES GRANTS

Question: When will the fiscal year 1987 appropriation be allocated to States?

Answer: We expect the fiscal year 1987 appropriation for the Grants for Infants and Families program to be allocated to States in July.

Question: How many States have indicated they will participate in the handicapped infant and toddler program?

Answer: As of May 5, 1987, 44 States and one territory have indicated that they plan to participate in the program.

Question: If there are no regulations issued before funding is distributed, how will the Department approve participants?

Answer: The Department will solicit and approve participants for fiscal year 1987 funds through an application package based on the statute.

DIFFERENCE BETWEEN STATE GRANTS AND GRANTS FOR INFANTS AND FAMILIES

Question: In your budget justifications, you state that you cannot support a program, such as the grant program for handicapped infants and toddlers, that allows Federal resources to be spent equally on all children regardless of income level or severity of handicap. Doesn't the Education of the Handicapped State grant program do just this?

Answer: Yes. However, unlike other Education of the Handicapped Act programs, this program would provide primarily medical, health, and social services. Federal support for programs providing such services are usually targeted on those most in need. As we explained in our budget justifications, we also have other reservations about the program, including a lack of information about the population to be served and the kinds of services required.

Question: What do you perceive as the difference between these programs?

Answer: The Education of the Handicapped State grant program focuses on the provision of primarily educational services to school-age handicapped children with specified handicapping conditions. The grant program for handicapped infants and toddlers focuses on the provision of primarily medical, health, and social services to a potentially broader set of "developmentally delayed" children who are not of school age in an effort to reduce the need for special education and related services when these children reach school age.

DEAF-BLIND PROJECTS

Question: Do you anticipate using the authority for extended school year demonstration projects under the Deaf-Blind program? If so, what funding might be available for such activities?

Answer: The Department is considering announcing a demonstration priority in the area of extended school years for fiscal year 1988. The funding level for such a priority has not been determined.

Question: What other demonstration projects are being funded under this program?

Answer: Demonstration projects in the Deaf-Blind program include those dealing with communication skills, supported employment, transitional skills, inservice training, Statewide systems changes, and various other research and demonstration areas.

Question: Your budget requests a reduction of $6 million in the Deaf-Blind program between the fiscal year 1987 enacted level and fiscal year 1988, in part because funding for demonstration projects is "out of proportion" to the number of deaf-blind children, according to your budget Justifications. Why do you not use some of the deaf-blind program funds for severely handicapped children, as authorized by P.L. 99-457?

Answer: Funds are appropriated by Congress under the budget activity title "Deaf-Blind Projects". We believe that in appropriating these funds that Congress expects that these funds be used to benefit children who are deaf and blind.

EARLY CHILDHOOD EDUCATION

Question: Are State grants for planning comprehensive services for preschool handicapped children now funded under another Education of the Handicapped program other than Early Childhood Education? At what level?

Answer: Authority for State grants for planning, developing, and implementing comprehensive service delivery systems was repealed by the Education of the Handicapped Act Amendments of 1986. Planning and development activities may be continued using the State set-aside under the Preschool Grants program. This set-aside is 25 percent of the Preschool Grants appropriation in 1987 and 20 percent in 1988.

Question: Does your budget request for the Early Childhood Education program include sufficient funding to maintain demonstration and outreach activities at current services levels as well as to accommodate directives to the Secretary of Education under provisions of P.L. 99-457?

Answer: The revised 1987 request includes funding for demonstration, outreach, and other Early Childhood projects in excess of the current services rate. The 1988 request is the same as the 1987 revised level and, therefore, is less than the current

services rate for 1988. The request is sufficient to accomodate all directives under P.L. 99-457.

SECONDARY AND TRANSITIONAL SERVICES

Question: What accounts for the $700,000 drop in new funding for Secondary and Transitional Services projects?

Answer: The drop in funding for new Secondary and Transitional Services projects results from higher continuation costs in fiscal year 1988. We are working to gradually redistribute funding so that about one-third of the funds available will be for new projects each year.

Question: What is the typical period for which transition projects are continued?

Answer: Transitional projects are usually funded for three years.

Question: Does the Department still place a priority on activities to ease the transition of handicapped youth from school to postsecondary pursuits?

Answer: Transitional services continue to be a high priority within the Department. In fiscal year 1987 alone we expect to make about 70 new awards totaling $7.7 million to address transition.

Question: What types of projects in this area do you think offer the most promise for general effectiveness?

Answer: Projects that offer the most promise are those that focus on assisting handicapped youth to develop skills for living and working in the community.

Question: You have asked for no inflationary increases for the Secondary and Transitional Services program. Why?

Answer: We believe that the current funding level for the Secondary and Transitional Services program is ample to address the current needs in this area. It should be noted that funds from several other project grant programs including Special Education Personnel Development and Deaf-Blind Projects also support secondary and transitional activities. In addition, transitional projects are funded by the Rehabilitation Services Administration.

INNOVATION AND DEVELOPMENT

Question: Since your budget proposal would considerably reduce funding for new Innovation and Development projects concerning the education of the handicapped, what would be the research priorities for the new dollars?

Answer: Under Part E of the Education of the Handicapped Act, proposed research priorities are required to be published biennially in the Federal Register. The proposed research priorities for fiscal years 1987 and 1988 include the following topics: field-

initiated research, student-initiated research, extant data base projects, home and school cooperation in social and motivational development, the impact of effective school reforms on handicapped students, and research on special education and related service personnel shortages.

The total fiscal year 1988 budget request for Innovation and Development projects is the same as the fiscal year 1987 amount of $18 million. However, because the amount needed to support continuation projects is up from $8.6 million in fiscal year 1987 to a current estimate of $11.5 million in fiscal year 1988, the amount available for new awards in fiscal year 1988 is considerably less than the amount available in fiscal year 1987. We attempt to maintain a funding cycle that allows for one-third of each year's appropriation to support new projects. Under this plan, an appropriation level of $18 million would result in $6 million for new awards, which is about the amount currently estimated to be available in fiscal year 1988.

Question: What do you believe has been the most promising new finding from research efforts funded by your office concerning the education of handicapped children?

Answer: One of the most promising new research findings that has resulted from our research relates to the impact of secondary and transitional programs. Several individual studies (e.g., Hasazi, Gordon and Roe, 1985; Edgar, Horton and Maddox, 1984) suggest that secondary aged students with disabilities who are provided with on-the-job work experiences as a part of their secondary education programs are much more likely to gain successful employment after graduation than those who do not have this experience. This finding, while still somewhat tentative, has significant implications for secondary programs in improving the employment status of their graduates. While not all ingredients necessary for successful transition to the work place are yet known, this research strongly suggests that a key ingredient will include the provision of planned work experiences for students prior to graduation.

Question: In your budget justifications, for example, you note that "biofeedback procedures with handicapped children can markedly enhance their performance." Please explain this finding further.

Answer: The project "Application of Biofeedback Relaxation Procedures to Handicapped Children" was initially funded in 1980 for a three-year period. The final report of the project indicates that academic performance of learning disabled children can be markedly enhanced through a program of systematic relaxation training. Significant improvements following this training were obtained in verbal IQ, reading, spelling, arithmetic computation, auditory memory, eye-hand coordination, and written expression. Relaxation training in the form of electromyographic biofeedback (EMG) and listening to prerecorded audio relaxation tapes were used to enhance these abilities in learning disabled children of all ages.

TELEVISION CLOSED CAPTIONING

Question: What is the current state of technology of decoders for captioning for the deaf?

Answer: The current state of technology of Line 21 decoders for closed-captioned television is reflected in the presently available Telecaption II adapter. This decoder differs from the original Telecaption I in several respects:

1. Smaller, more modern in appearance, with clearly lighted digital readout
2. Remote control features
3. Updated internal circuitry
4. 181 channel capacity (UHF, VHF, and cable)
5. Retails for approximately $80 less than the original decoder.

The Telecaption II decoder was acknowledged by the 1986 Consumer Electronics Show as one of the most significant consumer electronic innovations of 1986.

Question: How has the access of the deaf to decoders been affected by technological changes?

Answer: Technological advances have helped drive down the cost of decoding devices. Lower prices should help improve the access of the deaf to decoders. However, several problems have arisen.

The cable and pay television industry, in an effort to reduce unauthorized access to its broadcasts, has added nonstandard signals that are descrambled by the cable box. Unfortunately, some of the scrambling systems are incompatible with the Telecaption II decoder and result in a loss of captions. This problem has been resolved. Another newer problem involves the use of closed-captioned video cassettes. In an effort to reduce pirating (unauthorized duplication of commercial video tapes), a system developed by Macrovision has been incorporated on some tapes that prevents duplication of commercially produced video tapes. This anti-pirating system causes captions to be lost.

In response to the cable problem, the National Captioning Institute (NCI) has retrofitted 403 units since August 1986, at no charge to consumers. NCI has received a total of 53 complaints about the Macrovision problem and is currently developing a policy on how to handle this issue.

Question: What is the current cost of decoders and how has this changed since their original design?

Answer: The original Telecaption I television decoder sold for $280. The present retail price of the Telecaption II decoder ranges from $170 to $200.

Question: How many hours of television programming are currently closed cationed?

Answer: Currently there are approximately 100 hours per week of closed-captioned television available on the three major networks and the Public Broadcasting Service. An additional 79 hours are made available through other sources, such as cable and pay television, for a total of 179 hours.

Question: What has been the effect of Federal funding to expand public awareness activities concerning closed captioning?

Answer: The Federal Government has not supported public awareness activities directly. However, the National Captioning Institute has used revenues from the sale of federally subsidized decoder units for this purpose. The Department recently announced a competitive procurement to direct a public awareness campaign. This award is expected to be made prior to the close of the fiscal year.

EDUCATION TECHNOLOGY

Question: What has been the effect of the recent amendments to the Eduction of the Handicapped Act separating the authority for special education technology projects from media services?

Answer: The amendments have served primarily to differentiate between funding for captioning activities related to persons who are deaf, and activities that use technology to meet the needs of persons with a variety of handicapping conditions.

Question: What types of activities will receive priority for funding under the new technology program?

Answer: Priorities for fiscal year 1988 are expected to focus on improving the education of children with handicaps through computer-managed instruction and administrative software, and supporting State and/or regional efforts to increase access to and use of technology in education, employment, and independent living settings. Funds are also expected to be used to evaluate the effectiveness of the program.

Question: How does this differ from past efforts in this area?

Answer: The primary change in this program will be increased emphasis on stimulating cooperative ventures between the public and private sectors. For example, increased emphasis will be given to stimulating joint efforts between schools, publishers, and developers.

SPECIAL STUDIES

Question: What do you estimate will be the total costs involved in completing the two studies mandated by P.L. 98-199, the longitudinal study of secondary and postsecondary handicapped students, and the survey of expenditures on special education?

Answer: We expect the total cost of the longitudinal study to be approximately $5.5 million, and the total cost of the study on expenditures to be approximately $1.6 million.

Question: Which contractors are involved in these studies?

Answer: SRI International is the contractor for the longitudinal study. Decision Resources Corporation is the contractor for the study on expenditures.

DISABILITY CATEGORIES FOR REPORTING PRESCHOOL CHILDREN

Question: The 1986 amendments to the Education of the Handicapped Act no longer require States to report the number of preschool children served by disability category. How does this affect your ability to analyze and evaluate preschool programs for handicapped children in States?

Answer: Having valid data for preschool children reported by handicapping condition would help describe the characteristics of this population and the change in this group over time. However, we have reservations about the validity of the handicapping condition data reported for this age group and, therefore, analysis and interpretation of these data may be of limited utility.

SPECIAL EDUCATION PERSONNEL DEVELOPMENT

Question: In your budget documents, you justify nearly an $18 million reduction in the Special Education Personnel Development program from the fiscal year 1987 appropriation level because (1) inadequate evidence is available linking changes in the quality and quantity of special education personnel to the program and (2) because of the availability of similar funding from other sources. Have you conducted any evaluations of the effectiveness of this program on which to base these conclusions?

Answer: Our examinations of this program indicate that there is little evidence tying changes in the quality and quantity of trained personnel to funding provided by the program. Personnel shortages are often driven by factors that this and other Federal programs are not capable of influencing -- geographic preferences, teacher salaries, and so on.

Question: What other sources of funds are available to promote the education of special education personnel?

Answer: Funds are available from the major student aid programs (Pell Grants, Guaranteed Student Loans, etc.) that provide access to higher education in the United States. In addition, up to 25 percent of the funds available to States under the Grants to States program may be used by States for a variety of purposes including training.

Question: With the increases in Federal funding to promote preschool services to handicapped children, are there sufficient special education personnel well-trained in early childood education of the handicapped to staff expanded programs?

Answer: We do not know how many teachers and related services personnel will be required to serve preschool children.

Question: How will the Department address the need for special education personnel development in the area of early childhood services?

Answer: The supply and demand for personnel are the primary forces that will control the number of personnel available to provide early intervention services. States are able to use their

own resources in addition to Federal funds available under Federal State Grant programs to support training in this area.

The Department is also supporting a number of specific preschool and early intervention training activities. In the last three years, over $4,000,000 has been used under the Special Education Personnel Development program for the preservice training of personnel to work with infants who have handicaps. In addition, $3,000,000 has been awarded under the Early Childhood Education program to support inservice training of personnel who serve preschool handicapped children.

REGIONAL RESOURCE CENTERS

Question: Your fiscal year 1988 budget request for Regional Resource Centers includes $500,000 for a national coordinating technical assistance center, as authorized by the 1986 amendments to the Education of the Handicapped Act. What will be the Secretary's national priorities for information and technical assistance offered by the center?

Answer: The Federal Regional Resource Center (FRRC) will assist the Regional Resource Centers in the delivery of technical assistance to State education agencies in priority areas determined by the Secretary on an annual basis. In fiscal year 1988 a major focus of the FRRC will be on assisting State education agencies to develop and implement monitoring systems.

GRANTS FOR INFANTS AND FAMILIES

Question: As a rationale for a zero funding request for early intervention, you state in your testimony that Medicaid and other existing HHS programs are already providing support for early intervention services for handicapped infants and toddlers.

However, the new legislation clearly says that States cannot use their early intervention funds to reduce medical assistance provided through Medicaid and other health programs.

Are you suggesting that beyond those medical services that States cover through Medicaid, that there is no need for educational services for this population, or for the interagency coordination of early intervention services which our legislation will create?

Answer: No. However, in addition to providing funds for health and social services, HHS' Division of Maternal and Child Health and its Administration for Developmental Disabilities also provide funds that can be used for education-related and early intervention services. While we agree that there should be interagency coordination of early intervention services, at present, there is insufficient information about this population and its needs. We believe that, before the program is implemented, we should have more complete information about the population to be served, the specific types of services they require, and the kinds of interagency coordination that are needed.

Question: You also state that "given limited Federal resources, we question whether it would not be better to focus this

new program upon those most in need, such as the poor and the severely handicapped."

Why should handicapped infants be treated differently than school-aged handicapped children, who are eligible for services under P.L. 94-142, regardless of family income level?

Answer: The special education and related services required under P.L. 94-142 provide handicapped school-aged children with access to the educational system and with the means to attain their educational potential. These services, therefore, ensure equality of educational opportunity for handicapped children. Unlike the services required under P.L. 94-142, the services required under the program for handicapped infants would primarily provide the medical, health, and social services needed to improve their physical well-being. Federal support for medical, health, and social services for infant care is typically targeted on the basis of need.

Questions Submitted by Senator Lowell P. Weicker, Jr.

ISSUANCE OF REGULATIONS

Question: As you know, both the Education of the Handicapped Act and the Rehabilitation Act were reauthorized last year with major changes, including new programs for early intervention and supported employment. These programs, as well as other legislative changes, necessitate development of new regulations in order to effectively implement the programs.

Since it has now been over six months since both reauthorizations were signed into law, can you tell us when we can expect to see proposed regulations?

Answer: Twenty-seven new or revised regulations have been prepared as a result of the the Education of the Handicapped Act and Rehabilitation Act reauthorizations. Four have been published. Twenty-three are currently undergoing review and will be published as soon as the review is completed. We expect the Notice of Proposed Regulations (NPRM) for the Infants and Families program to be published in June and the final regulations to be issued in October. We expect the NPRM for the Supported Employment program to be pubpublished in May and the final regulations to be issued by the end of July.

MONITORING COMPLIANCE WITH PUBLIC LAW 94-142

Question: Madeleine, I have been contacted by parents from several States who are concerned that the Federal monitoring of States for compliance with the requirements of P.L. 94-142 is inadequate. This is not a new issue -- I'm sure you recall we discussed it at last year's hearing, as well. Can you tell me what steps the Department has taken within the last year to increase its monitoring eforts?

Answer: Our efforts in the past year have been primarily directed to improving, rather than increasing, our monitoring efforts. We have devoted considerable effort to improving data

collection instruments, accelerating reporting schedules, and similar activities. Our overall expectation is that this attention to systems development will, in the long run, enhance both the quality and quantity of our monitoring activities.

Question: How many monitoring visits were completed during fiscal year 1986 -- and how many to date in fiscal year 1987? By "completed" I mean the final reports were actually issued. Can you summarize the findings of those reports?

Answer: A total of 19 on-site visits were conducted in fiscal year 1986. Of these, six States have received final reports. An additional six States have responded to their draft reports, and we expect to issue final reports within the next few weeks. We are awaiting responses to their draft reports from the remaining seven States.

To date, seven on-site visits have been conducted during fiscal year 1987. Three more are scheduled, and four additional State visits are planned if time permits. We are presently reviewing the draft reports for the first four on-site visits made.

Our findings regarding the on-site visits made in fiscal year 1986 are provided in the 1987 Annual Report to Congress on the implementation of P.L. 94-142.

Question: How many full time professional staff do you have in your office actively involved in monitoring activities? Do you believe additional professional staff are needed?

Answer: Principal responsibility for monitoring activities is located in the Program Review Branch (PRB), Division of Assistance to States (DAS). PRB has 13 staff members involved in monitoring activities. We are currently recruiting three additional professional staff to strengthen the monitoring function. In addition, three staff members from our Program Administration Branch spend a significant portion of their time in support of monitoring activities. Three management positions in DAS (one currently vacant) also involve substantial professional support for monitoring activities.

Our record for timely monitoring over the past one and a half years appears to indicate a need for additional staff. However, during this time, we never had the full complement of staff members that had been authorized for monitoring activities. We hope that, with full staffing and the implementation of the monitoring systems we have developed, additional staffing should not be necessary.

Questions Submitted by Senator Pete V. Domenici

GRANTS FOR INFANTS AND FAMILIES

Question: The administration proposes to terminate State Grants for Infants and Toddlers. What other programs are in place to serve this population?

Answer: There are three offices in the Department of Health and Human Services that provide funds for services to this popula-

tion. They are: (1) the Health Care Financing Administration, which provides funds for health and medical services; (2) the Division of Maternal and Child Health, which provides funding for a variety of services, including health, social, educational and early intervention services; and (3) the Administration on Developmental Disabilities, which provides funding for child development, protection and advocacy and exemplary services, including early intervention services.

Question: How many children are served under those programs?

Answer: There is no accurate information presently available about the number of handicapped infants and toddlers who are served under these programs. We hope to obtain this information during the study of Federal funding sources and services which was mandated by the Education of the Handicapped Act Amendments of 1986.

Question: Do these programs serve all eligible children or are there unmet needs?

Answer: We do not know at this time whether all eligible children are being served under these programs or whether there are unmet needs. We will be able to provide this information only after completion of the study of Federal funding sources and services which was mandated by the Education of the Handicapped Act Amendments of 1986.

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REHABILITATION SERVICES AND HANDICAPPED RESEARCH

QUESTIONS SUBMITTED BY THE SUBCOMMITTEE

PROGRAMS FOR THE PARTIALLY SIGHTED

Question: What programs does the Department finance that target the partially sighted? Are the needs of the population significantly different from those of the completely blind?

Answer: The Society for the Prevention of Blindness (SPB) estimates that approximately 80 percent of the 600,000 persons in the United States who are legally blind have partial vision. These individuals, along with many of the 1.6 million individuals estimated by SPB to have a severe visual loss which makes it impossible to read newspaper print with glasses, may be eligible to receive vocational rehabilitation services provided through the Vocational Rehabilitation State Grant program. Eligibility is based upon an evaluation to determine if the visual handicap is a barrier to employment and if the individual could benefit from and be employed as a result of receiving rehabilitation services.

Older individuals with partial vision may be eligible to receive services through the Independent Living Services for Older Blind Individuals program which has a specific priority for partially sighted persons. Partially sighted persons who qualify as legally blind are eligible to participate in the Randolph-Sheppard Vending Facility Program for the Blind. Other programs which benefit the partially sighted include the American Printing House for the Blind, which distributes free large print materials, and educational programs provided through the Education of the Handicapped Act to disabled children and youth.

The needs of individuals in the partially seeing population often are significantly different from blind persons since they can receive improved visual correction as a result of physical restoration, optical aids, and low vision services such as training in the use of aids and devices to maximize the use of remaining vision.

BASIC STATE GRANTS

Question: The Administration request for a rescission in fiscal year 1987 and reduced funding for fiscal year 1988 would put basic State grant funding below fiscal year 1980 levels, when inflation is accounted for. Why does the Administration want to reduce the buying power of the State Vocational Rehabilitation program?

Answer: The Administration's 1988 request does not seek to reduce the buying power of the program, but in fact to maintain the Federal contribution in 1987 and 1988 at the level enacted by the Congress for fiscal year 1986. Our proposal for 1987 would limit the increase in the appropriation request to $39 million over the 1986 level, the amount needed to cover the costs of inflation. For 1988, we requested an additional $44 million above the revised request to offset the effect of inflation. The Basic State Grant program has received substantial annual increases over the last several years, generally well in excess of the inflation level automatically calculated into the authorization for this program.

Between 1980 and 1987, funding for this program increased by 56.7 percent. In addition, the States have demonstrated an increasing commitment to vocational rehabilitation, in 1986, overmatching the Federal requirement by over $77 million.

COST-EFFECTIVENESS OF BASIC STATE GRANT PROGRAM

Question: The fiscal year 1981 annual report of the Rehabilitation Services Administration provided useful information on the costs and savings of the State Vocational Rehabilitation program. This report indicated that the program was self-supporting due to taxes paid by and reduced public support for handicapped persons who had been rehabilitated into employment. When might the Congress expect to receive updated information regarding the cost-effectiveness of this program?

Answer: The goal of the Basic State Grant program is to meet the needs of handicapped individuals so that such individuals may prepare for and engage in gainful employment to the extent of their capabilities. As such, the Department has periodically attempted to compare the benefits derived by these individuals and society to the costs of providing rehabilitation. Unfortunately, the estimating procedures previously used by the Department in determining the information which you cite were somewhat unsophisticated and involved several questionable assumptions. Each such assumption can affect outcome measures. The Department has been studying ways to arrive at a definitive cost-benefit analysis and is presently conducting a design study to do so.

STUDY OF BASIC STATE GRANT CASELOAD TRENDS

Question: What is the scope of the Administration's study of the impact of vocational rehabilitation?

Answer: The purpose of this study is to contribute to the further development of benefit-cost models for assessing net returns on investments in vocational rehabilitation (VR) services. The study will identify and document the full continuum of short and long-term benefits resulting from VR services, including both traditional employment-related outcomes and non-economic benefits derived from the VR experience. It will also assess the benefits and costs of various alternative approaches to providing VR services to clients, including such newer strategies as supported and transitional employment. The study will empirically assess various models and recommend one or more models for conducting a full scale assessment. The second phase of the study will involve a pilot test of nine States and include information profiles on approximately 200 cases per State. The study will also result in certain special reports on various features of the VR program such as services to special target groups and the relationship between particular variables.

Question: How much funding is being used for this study?

Answer: The cost of this two year study was $498,649 in fiscal year 1986 and $544,395 for fiscal year 1987. We would be pleased to provide a briefing for members of Congress interested in further information on this study.

EVALUATION

Question: If evaluation funds are cut 54 percent as requested, will sufficient funding be available to evaluate the program authorized under the Rehabilitation Act and complete the impact study?

Answer: The 1988 budget request for Evaluation is $975,000. By 1988, almost every program authorized by the Rehabilitation Act will have had a recent evaluation. A total of 19 studies were funded between 1984 and 1986, and seven are in process for 1987. The impact study was fully funded by evaluation funds from 1986 and 1987. The proposed 1988 funding level is adequate to cover any needed studies of vocational rehabilitation programs. We do not believe that additional funds above the request level could be used effectively.

VOCATIONAL REHABILITATION SERVICES FOR AMERICAN INDIANS

Question: The Administration has requested that the entitlement of vocational rehabilitation funds for American Indians be reduced by 50 percent. What evidence does the Administration have that the authorized increase in funding of Indian services is more than is appropriate to meet the rehabilitation needs of American Indians?

Answer: The Administration's request for grants to Indians provides for reasonable growth in this program -- 10 percent in 1987 and 4 percent in 1988. Congress appropriated a 250 percent increase for grants to Indians in 1987. There is simply no programmatic reason to more than double the Indian program in one year, especially when money was returned to the Treasury for this program in both 1985 and 1986. In both of these years, there were not a sufficient number of fundable applications to spend all of the appropriated funds, even though the appropriation levels were significantly lower than the 1987 level.

LOWERING UNEMPLOYMENT AMONG THE DISABLED

Question: Mrs. Will, I'm concerned about the results of last year's Lou Harris Poll which indicated that two-thirds of the working age disabled are unemployed. Rather than being able to pursue some activity that increases their self-esteem and contributes to the economy, these handicapped citizens are confined to dependence on government income maintenance programs.

Wouldn't funding the Supported Employment Program be an important first step in increasing employment rates among the handicapped?

Answer: In an area as new as supported employment, we would prefer to continue with our demonstration approach rather than requiring States to establish comprehensive and costly programs. We do consider supported employment to be one of many important approaches to increasing employment rates among severely disabled persons, and, therefore, are funding 27 statewide supported employment demonstration projects at a cost of almost $14 million.

OPPORTUNITIES FOR DISABLED PERSONS

Question: What more should we be doing to give the disabled the opportunity to become productive citizens?

Answer: In order to enable disabled persons to become more productive citizens, RSA should continue its efforts to improve its vocational rehabilitation and independent living programs. The following are examples of existing RSA initiatives that are dedicated to enabling disabled persons to become more independent and productive citizens.

Supported Employment

- Fund a new project of national scope to provide community-based supported employment services to severely disabled persons.
- Continue 27 statewide supported employment demonstration projects designed to help employ severely disabled persons who need ongoing support to function in a competitive employment setting.
- Arrange ongoing contracts between business representatives of national hospitality/service industries and supported employment providers to identify jobs for severely disabled individuals.

Independent Living - Title VII, Part B

- Publish invitational fiscal year 1987 priorities to serve a broad range of disability groups and provide transition services from school or institution to work and community living for individuals with severe handicaps.

Projects with Industry (PWI)

- Fund 10 new projects in 1987 to involve new industries in employing disabled individuals. Since OSERS wants to ensure that the successful PWI model is available to underserved areas, consideration will be given to geographic distribution when funding these new projects.

American Indian Services Project

- Nine new awards are provided for Vocational Rehabilitation Services to disabled American Indians residing on reserva tions to expand services to underserved tribes.

Rehabilitation Engineering

- With Rehabilitation Engineering being defined for the first time in the Rehabilitation Act Amendments of 1986, three new centers will be funded to enable disabled individuals to function more independently in school or vocational programs, on the job, or in the home.

STUDY ON BASIC STATE GRANT CASELOAD TRENDS

Question: The Department has stated that they "do not understand the caseload trends for this program". They have subsequently implemented a study to determine why caseloads are declining when appropriations are increasing.

What is the current status of the study?

Answer: The Department is in the final phase of the study, which is evaluating vocational rehabilitation agency caseload patterns and trends. We have been conducting a secondary data analysis to determine causes of change in the size of the applicant pool and causes of variation in State statistics. We anticipate having an analysis of the findings from the study by the fall of 1987.

RELATIONSHIP OF PERSONS SERVED TO APPROPRIATIONS

Question: Does the Department assume that there is a direct correlation between appropriations and the number of persons served?

Answer: No, we do not believe that there is a direct correlation between appropriations and the number of persons served. There are a multitude of factors which influence the number of persons who apply and are accepted for services each year. These include annual variations in the characteristics and service needs of the applicant pool, national and local economic and demographic trends, and the availability of alternative sources of services such as private providers. The Department has noted a general decline in the number of persons applying for vocational rehabilitation services over the past decade. This has occurred despite large annual increases in funding over the same period. We do not understand the reasons for these caseload trends and are in the process of studying them in order to assess the causes of change, reasons for variation in State performance, and potential indicators of future caseload activity.

NEED FOR ADDITIONAL FUNDS

Question: If caseloads have been declining and appropriations have been rising, what is the additional money being used for?

Answer: To a certain extent, additional funds have compensated for inflation and have allowed rehabilitation agencies a wider range of choices in modes of service delivery. Funds have also been used by States for special projects and to upgrade State accounting and reporting systems.

Questions Submitted by Senator Lowell P. Weicker, Jr.

TRAINING NEEDS FOR REHABILITATION PERSONNEL

Question: Madeleine, in the Senate report accompanying the reauthorization of the Rehabilitation Act last year, the Rehabilitation Services Administration (RSA) was directed to submit a report along with the fiscal year 1988 budget submission, on the shortage areas of rehabilitation personnel. This report has been statutorily mandated in the Rehabilitation Act since 1984, and is to be provided

to Congress annually. However, the RSA has never issued any of these reports. At the same time, your budget proposes a 13 percent reduction in training funds -- from $29.5 million in fiscal year 1987 to $25.8 million in fiscal year 1988.

Can you tell me when we can expect to see the report that was due here in January with the fiscal year 1988 budget?

Answer: As required by the Rehabilitation Act Amendments of 1984, RSA submitted a report detailing how the training funds for the fiscal year prior to the submission were allocated and how funds were proposed for distribution in the succeeding fiscal year for both 1985 and 1986. These reports also discussed what was known about shortages and the Department's efforts to collect reliable, statistically defensible data in this area.

The Department awarded a contract in 1984 to develop a training fund allocation model which was completed in 1986. While providing useful background data, the study developed a system that was not administratively feasible to implement. Building on this effort, the Department conducted a National Rehabilitation Personnel and Training Needs Assessment in fiscal year 1987. The report for fiscal year 1987 was not delivered to the Congress in January because we were waiting for the results of this survey. We are utilizing the information collected from the survey in formulating the Rehabilitation training allocation plan for fiscal year 1987. The report will be be forwarded to the Congress in June 1987, and will include information resulting from the analysis of the data collected in the survey.

TARGETING TRAINING FUNDS

Question: How can the Rehabilitation Services Administration make informed decisions about where to target training funds, without information about where shortages exist?

Answer: The National Rehabilitation Personnel and Training Needs Assessment which has been conducted in fiscal year 1987 will identify training needs and areas of shortage in rehabilitation specializations needed to support the Federal/State vocational rehabilitation system. The results of this survey are being utilized to determine priorities and make allocations to training categories for fiscal year 1987. Our analysis of this data will also be used in making decisions for fiscal year 1988.

RATIONALE FOR REDUCING TRAINING FUNDS

Question: What rationale do you have for reducing these funds without information which could suggest the need for additional resources?

Answer: The Department has collected information on areas of training shortages and priorities and is allocating fiscal year 1987 funds accordingly. However, there is no evidence to suggest that the funding we provide either alleviates or mitigates any of these shortages. Without such information, we do not believe there is an adequate rationale upon which to base increased funding for this program.

TRAINING REPORT

Question: Can you guarantee me that this committee will have this report prior to the time we mark up an fiscal year 1988 appropriations bill?

Answer: The results of the National Rehabilitation Personnel and Training Needs Assessment, which was conducted to identify training needs and possible areas of critical shortages of rehabilitation specialists, will be included in the annual report detailing the Department's allocation of training funds mandated by the Rehabilitation Act Amendments of 1984. This report will be forwarded to the Congress within the next month. The survey resulted in a rich array of useful information. The report will summarize the analyses that have been conducted on the data thus far.

REHABILITATION STATE GRANT FUNDING

Question: The Department is proposing a reduction of $52.8 million in funding for the Rehabilitation State Grant program from last year's total of $1.28 billion. According to our estimates, that means that as many as 43,000 fewer persons would receive rehabilitation services next year.

When States indicate that they have waiting lists for rehabilitation services, and are only able to serve about one in twenty eligible clients, what is the rationale for reducing these funds?

Answer: It cannot be assumed that all handicapped persons in the United States of working age are eligible for vocational rehabilitation or are seeking services through the State VR system. The majority of adult disabled persons interested in working can enter the competitive employment market without assistance from public rehabilitation. Some of these persons can do so without specialized assistance. Others enter with the assistance of special recruitment and assistance programs run by corporations and other employers. Still others avail themselves of the continually growing private sector rehabilitation system. While the percentage of persons who apply for VR services and are found eligible has remained consistent, the actual numbers of persons applying for services have consistently declined over the past 11 years.

Vocational rehabilitation and other programs which assist the handicapped are priorities within the Department. For this reason, we requested an additional $44 million above the 1987 revised request level to offset the effect of inflation in 1988. The fact that this occurred at a time when the 1988 request for many other programs was reduced below the 1987 request level demonstrates our committment to this program.

COST-EFFECTIVENESS OF REHABILITATION PROGRAMS

Question: When the cost-effectiveness of these services is unarguable--roughly $11 returned to the economy for every dollar spent--how can we afford not to maintain our commitment in this area?

Answer: The Department is firmly committed to maintaining

programs which increase opportunities for handicapped persons. Despite the need to reduce Federal expenditures, these program were generally proposed for level funding or increases in 1988. The 1987 revised request level included sufficient funds to cover inflation and the 1988 appropriation includes an increase above the revised request level to further offset the effects of inflation.

The benefit to cost ratio of $11 to $1 to which you refer is based on calculations performed several years ago. The ratio was based on an analysis of data which contained numerous questionable assumptions and unsophisticated data collection techniques. The Department has recently commissioned a study on how best to calculate benefits to cost using up-to-date methods and including non-economic benefits. We anticipate that the study will be completed by September 1988.

SUPPORTED EMPLOYMENT

Question: Madeleine, for many years you have advocated the benefits of providing supported employment services for severely handicapped individuals. Last year, as you know, Congress translated what you and I both know about the cost-effectiveness of supported employment into a matter of national policy, by creating--and funding--a new State grant program for supported employment.

Do the results of these demonstration projects validate the findings that employing severely disabled persons in the competitive workforce can be accomplished in a cost-effective manner?

Answer: The RSA funded statewide demonstration projects have not been in place long enough to yield such data. However, several small non-statewide supported employment projects have developed some cost data and information which we will cite below. The RSA is providing technical assistance to supported employment demonstration projects to assist them in developing and implementing consistent data collection systems that will enable RSA to assess more fully the cost-effectiveness of statewide demonstration projects initiated in 1985 and 1986.

The following are findings of three non-statewide supported employment demonstration projects.

Individual Placement Project Approach

A supported employment project sponsored by Virginia Commonwealth University placed individuals with severe disabilities in food services and janitorial jobs. The projects has served 206 individuals with disabilities between May 1978 and December 1985. Under this project, the cost of maintaining a supported employment placement during the first year averages $3,182 per worker, including an average of $2,661 in Federal-State vocational rehabilitation funds; second year costs average $882 per worker. The greatest monthly costs occur during the initial several months of the placement when training and intensive support services are required to stabilize individuals with disabilities.

Supported employment workers in the Virginia project all earn the statutory minimum wage, average 30 hours of paid employment per week, and have earning averaging $435.60 per month. Prior to place-

ment as supported employment workers, 81 percent of the individuals in this project earned less than $200 per year.

An analysis of the Virginia project indicates that the average annual savings in public funding was $3,532 for each of the 206 supported employment workers in the project between July 1, 1984 and June 30, 1985. For each $1 of public funds expended during this period, $2.97 in public savings was recouped. This ratio is based on the following costs and savings between July 1, 1984 and June 30, 1985.

SUPPORTED EMPLOYMENT

Costs:

Operation project costs	$137,384
Targeted jobs tax credit	49,149

Savings:

Decreases in expenditures in alternative services programs	$344,414
Reductions in Supplemental Security Income	114,409
Increased taxes paid by supported employment workers	92,027

Enclave Project Approach

Washington:

Trillium Employment Services in the State of Washington established an enclave project in August 1983 where workers do electronics subassembly work. Since August 1983, 14 persons have been employed. On-going support costs averaged $75 per month per worker between January 1, 1985 and April 11, 1986. In this project, individuals earn sub-minimum wages, work full-time, and had average monthly earnings of $486 per worker in 1985. Before entering supported employment, these individuals had average earnings of $44 per month.

An analysis of the costs and benefits of this program indicates that for each $1 of public funds spent between May 1, 1985 and April 30, 1986, $5.49 in public savings was recouped.

Costs:

Operational costs	$8,343

Savings:

Decreases in expenditures in alternative services programs	26,680
Decrease in income transfer payments	10,866
Increased taxes paid by supported employment workers	5,281

Mobile Crew Project Approach

New Hampshire:

The New England Business Associates established three mobile crews in New Hampshire. Each mobile crew includes five supported employment workers. Funds for the crews are provided through State appropriations for mental health and mental retardation services.

These projects had average costs of $8,300 per worker in the first year of operation. Daytime programming for these individuals would cost approximately $15,557 per client if they were not in the supported employment project.

SUPPORTED EMPLOYMENT

Question: Do you believe that the action of Congress in creating this program was justified, or do you believe that the demonstration program that has been funded at $9 million for the last two years is sufficient?

Answer: We certainly believe that supported employment shows great promise as a means to provide employment opportunities for individuals with severe disabilities. The Administration has demonstrated its commitment to supported employment by spending almost $14 million on 27 statewide supported employment projects in 1987. Of these 27 projects 17 were initiated in 1986 and the remaining 10 began in 1985. In an area as new as supported employment, the Department believes that States should be given the opportunity to develop the capacity to provide supported employment services before being required to establish comprehensive and costly programs. We, therefore, do not support establishing a supported employment formula grant program until we have more experience with our ongoing statewide demonstration projects, and have collected and analyzed data on employment outcomes from these projects.

PROPOSED ELIMINATION OF FUNDING FOR RECREATION PROGRAMS

Question: The Department has proposed to eliminate funding for the Special Recreation Programs for the Disabled in fiscal year 1988, which were funded at $2.3 million in fiscal year 1987. This is certainly inconsistent with the changes made in the Rehabilitation Act last year to emphasize the role of recreational programs in increasing the integration of individuals with handicaps into the community. It isn't enough to try to "normalize" the lives of disabled individuals through emphasizing competitive work and community living arangement--recreational activities are an essential component, too.

If the Department is truly commited to fostering the full integration of disabled individuals in society, what is the rationale for eliminating this program?

Answer: The rationale for eliminating the Recreation program is that the Department believes that recreation is an activity that would more appropriately be financed at the local level by private charities, municipalities, and other non-Federal sources. Many recreation programs already assist disabled people to become more integrated into their communities, and the Administration supports such activities so long as they are funded by non-Federal sources.

HIGHER EDUCATION

Questions Submitted by the Subcommittee

AID FOR INSTITUTIONAL DEVELOPMENT

Question: The President's 1988 budget would reduce funding for Title III programs--which aid financially vulnerable colleges--by two-thirds, requesting funds only for historically Black colleges and universities. Being an active supporter of the historically Black colleges in my State of Florida, I am glad to see that you have not zeroed out that assistance program. But other needy colleges that are not historically Black do not fare as well. Your budget justification seems to acknowledge that some colleges may, in fact, close without continued Title III aid, by asserting "there is no need to increase or keep constant the number of colleges and universities in existence." How many colleges will close their doors if your 1988 Title III budget request is approved?

Answer: We do not expect that our budget request for the Title III programs will cause any institution to close. The grants provided under this program are a small enough portion of an institution's operating budget that it would be unlikely for a Title III grant to have any significant impact on the overall financial health of an institution. Institutions are far more likely to have to close because of declining enrollments, a factor which the Federal Government cannot control, than the elimination of funding under the Title III program.

Question: Although the fiscal year 1988 budget justifications for the Aid for Institutional Development programs state that the President continues to be committed to strengthening the historically Black colleges and universities, why, as of early February 1987, had the Administration failed to release the fiscal year 1985 and fiscal year 1986 annual reports required under the President's executive order to expand Federal obligations to these institutions? When will these reports be released?

Answer: The fiscal year 1985 Annual Performance Report on Executive Agency Actions to Assist Historically Black Colleges and Universities was approved for release on February 26, 1987. Information for the fiscal year 1986 report is currently being compiled and should be available for release later this summer.

Question: What are they likely to show regarding Federal obligations to historically Black colleges and universities?

Answer: The fiscal year 1985 Annual Report continues to show an overall increase in financial support to historically Black colleges and universitites. Compared to the fiscal year 1981 base year, HBCUs had an overall increase of nearly $85 million in Federal support, from $544,818,000 to $629,552,477. Compilation of the fiscal year 1986 report has not been completed, however, we expect the reported level of support to HBCUs to be consistent with that of previous years.

Question: How much of the fiscal year 1987 appropriation for the Strengthening Institutions program of the Aid for Institutional Development programs will be awarded to four-year colleges that do not benefit from the statutory set-aside for institutions with the "highest" percentages of minority students?

Answer: We have not received applications yet from institutions this year. It is difficult, therefore, to tell how many institutions will meet both the two-year and minority institution set-asides. How much these institutions receive will determine the amount available to four-year colleges which do not enroll the highest percentage of minority students. We expect that about 70 percent of the Part A funds will be awarded to two-year institutions as a result of the two-year institution set-aside but cannot estimate the proportion of the remaining 30 percent that will go to minority or non-minority four-year institutions.

Question: To what extent do institutions serving significant numbers of Hispanic, Native Hawaiian, and Pacific Island students participate in the Aid for Institutional Development programs?

Answer: Of the 555 Institutional Aid grants awarded during fiscal year 1986, 34 were awarded to predominantly Hispanic institutions and nine to predominantly Asian/Pacific Island institutions. The Department does not collect statistics on institutions which are considered as serving predominantly Native Hawaiian students. It is too early to predict their participation rates in the reauthorized versions of these programs.

Question: Why doesn't the Department of Education's assertion that any funding losses suffered by public institutions, under its fiscal year 1988 proposal for the Aid for Institutional Development programs, could be made up by State legislatures also apply to public historically Black colleges and universities?

Answer: It is true that public HBCUs receive State support, which could be increased to replace any loss of Title III funds. However, the Administration has a special commitment to these schools. Prior to the landmark Supreme Court ruling in Brown v. Board of Education, public historically Black colleges and universities were systematically discriminated against in the allocation of State resources for higher education, and were the primary source of post-secondary education for Black Americans. While the court ruling identified and attempted to correct this problem, the Federal Government had limited powers to enforce the end of this discrimination until the passage of the Civil Rights Act. In response to this past pattern of discrimination and the historic role of these schools, the Federal Government has provided support to public and private historically Black colleges and universities. In reauthorizing the Higher Education Act of 1965, which includes a new program of formula grants to historically Black colleges and universities, the Congress stated its intention to continue this support for another 10 years. We agree that such continued support is appropriate.

Question: What responsibility does the Federal Government have to provide institutional development and improvement funds to any public institution of higher education? Is there any Federal responsibility to ensure that public or private institutions serving

federally aided disadvantaged students have adequate financial and other resources?

Answer: Federal funds to support postsecondary education should be distributed primarily through the student aid programs, allowing the students to select which schools receive support. The Federal Government's role in providing support directly to institutions for institutional development and improvement at public as well as private institutions has been quite limited. Historically, the Federal Government has provided funds primarily to institutions which clearly were addressing a recognized national need, such as for research and development in particular areas, and for historically Black institutions.

Question: Please explain how you propose to implement the 1986 amendments to the Strengthening Institutions program that provide alternative eligibility factors for enrollment of needy students.

Answer: The Department is currently preparing regulations designed to implement the Higher Education Amendments of 1986, including Title III. The eligibility criteria contained in the statute require institutions to enroll a substantial number of needy students, and have a relatively low educational and general expenditure per full-time equivalent student enrolled. The statute permits institutions to meet the needy student criteria in either of two ways:

-- more than 50 percent of its enrollment must be receiving some form of Title IV need-based aid; or

-- a substantial percentage of its enrollment must be receiving Pell Grants in comparison with other similar institutions.

The regulations, which will be published in the near future, will provide more specific information on how these criteria will be applied.

Question: Please provide a listing of the colleges and universities that meet the current definition of an historically Black institution, and those that would be added and deleted if the Department's proposed definition were accepted.

Answer: The Department is currently in the process of developing regulations for the new program. In the regulations, we will publish a list of those institutions which we believe meet the statutory definition of historically Black colleges and universities. We are proposing to alter the definition of historically Black colleges and universities in two ways.

First, we would eliminate the requirement that an historically Black college continue to have as its principle mission the education of Blacks. We believe that this is an unconstitutional requirement, since it would require schools to discriminate. Since we developed our list of eligible institutions based on the intent of Congress, deleting this requirement would not effect eligibility.

Second, we would change the date from 1964 to 1954 by which an institution must have been founded in order to meet the definition of an historically Black college or university. We believe that this

change is necessary because, after the Brown v. Board of Education decision, it was unconstitutional for an institution of higher education to be founded with its principle mission being the education of Blacks. This would eliminate from eligibility approximately six institutions founded between 1954 and 1964.

Question: Of the amounts appropriated to date for endowment challenge grants, what portion has been matched by participating institutions?

Answer: Of the $44,572,000 appropriated between 1984 and 1986 for endowment grants, a total of $26,737,521 has been matched to date.

Question: Assuming current rates of return, what size endowment would the historically Black colleges and universities need to ensure the same revenue stream they presently receive from the Title III appropriation?

Answer: No grants have yet been made under the new HBCU authority, however, the average grant to historically Black colleges and universities under Part B in fiscal year 1987 is estimated at just under $500,000. To achieve an annual endowment income of this amount, assuming simple interest at 8 percent return, would require a total endowment corpus (including any required non-Federal match) of $6,250,000. If the total return on the investment is considered (changes in market value as well as interest) the amount needed will be far less.

Question: How does this compare to their current endowment?

Answer: In fiscal year 1985, the most recent year in which data on market value of endowment is available, the total market value of endowments at all historically Black colleges and universities was $316,816,418. However, endowment resources are not evenly distributed among the historically Black colleges and universities, in part because they vary in size and in fund-raising efforts, and because public institutions depend more on State subsidies than endowment income. The average market value of endowments at HBCUs is about $3.4 million, which includes a great variance with the maximum market value of endowment at one HBCU of $59,234,349 (Hampton Institute) and the minimum market value of endowment at several HBCUs of $0. The average market value of endowments at public HBCUs is $416,933 compared to $5,876,905 for private HBCUs.

Question: At current funding levels for the endowment challenge grants, how many years would it take for the historically Black institutions to build their endowment to the level of financial self-sufficiency?

Answer: Assuming a constant level of funding, and if all institutions were relatively equal in the amount which they currently have in endowment funds, and that they had an equal ability to raise matching funds, it would be possible for historically Black colleges and universities to replace their current Title III grant with endowment income within 10 years. Since institutions do not have the same size endowments nor the same capability to raise funds, it is difficult to estimate more precisely how long it would take for all

the historically Black colleges and universities (HBCUs) to build the necessary endowment.

Question: How do you assess the relative financial vulnerability of institutions that receive assistance under Title III-A versus III-B, as measured by size of endowments, outstanding indebtedness, operating deficits, or other indices you consider appropriate?

Answer: We have not previously made such assessments, and do not yet know what schools will apply for assistance under the revised Part A.

SPECIAL PROGRAMS FOR THE DISADVANTAGED (TRIO PROGRAMS)

Question: The Department's justification for its spartan budget relies heavily on the need for overall deficit reduction. In different times, or with different priorities in Federal spending, wouldn't the TRIO programs be one of the first places you would add back funding?

Answer: Given the present deficit situation, we believe the proposed cuts are necessary. Moreover, because some of the TRIO programs are not cost-effective or are duplicative of State and institutional activities they would not be high priorities under any overall budget situation.

Question: You are proposing a $94 million cut in the TRIO program, a similar proposal to those you have proposed in the past.

How successful are the five components of the TRIO program in providing services to promote access to and retention in post-secondary institutions for individuals from disadvantaged backgrounds?

Answer: The Systems Development Corporation, Applied Systems Institute, Inc., and the General Accounting Office have all done reviews of the Student Support Services and Upward Bound programs which indicate some relative success of these programs in influencing disadvantaged youths to apply to college, obtain financial aid, attend college, and persist in college. However, many high schools, postsecondary institutions and other organizations run such programs without Federal funds. Impact evaluations have not been conducted of the Talent Search or Educational Opportunity Centers programs.

Question: Do you know anything about the program's ineffectiveness to meet its goals that warrants such a drastic reduction?

Answer: The proposed reductions in funding for the TRIO programs are not so much a result of ineffectiveness demonstrated in meeting the goals for which they were established. We believe that in this time of such severe budget constraints, Federal funds for postsecondary education must be carefully targeted at the most critical areas, and that duplicative or overlapping services must be eliminated. The counseling and information services provided through the TRIO authorities are also provided elsewhere. Such services are also increasing without Federal funding; with the declining population of traditional high school-age graduates, colleges and universi-

ties are increasingly competing with each other to enroll those students. For example, we have noticed in the HEGIS reports that colleges and universities are beginning to spend significantly more money on admissions and recruitment. We believe that "outreach" responsibility truly lies primarily with colleges and high school counselors.

Question: Your hearing statement indicates that the Staff Training program under TRIO is no longer necessary because the Department plans to train financial aid officers regarding the Higher Education Act amendments. But staff training covers more than just financial aid information dissemination; it prepares personnel for the Support Services, Upward Bound and Talent Search project. Where will training assistance for these programs come from if Staff Training is zeroed out?

Answer: We are proposing to eliminate the Staff Training program because we believe that it is preferable to permit grantees to use some of their project funds to pay for training opportunities directed at the particular needs of their staff.

Question: What steps has the Department of Education taken to ensure the validity and objectivity of its application review process, particularly as it will be applied to the current award cycle for the Student Support Services program?

Answer: The Education Department General Administrative Regulations (EDGAR) require applications to be evaluated by three or more experts, one of whom is not a Federal Government employee. Prior to fiscal year 1986, most discretionary grant programs in the Department used three non-Federal experts on each review panel for proposals submitted.

Question: Has your policy regarding review panels for discretionary grants within the Department of Education changed since it was first announced last year?

Answer: Insofar as fiscal year 1987's Special Services applications' reading was concerned, our procedures for reader selection, reader orientation, and location of the reading were minimally different from those used three years ago when these grants were last competed.

Question: How will the Department ensure that top quality Federal employees will be used as readers, rather than simply those who can be spared from their current positions?

Answer: In the selection of all readers, we sought to obtain persons who were familiar with issues affecting the education of the disadvantaged. Not more than one Federal reviewer was used on each three-person panel; the other two persons were not employees of the Government. Each reader, Federal and non-Federal alike, received approximately three hours of intensive training (orientation) before he or she evaluated proposals.

We believe the process outlined above insures the validity and objectivity of the application process and that all readers, including Federal employees, were highly qualified to serve on the Special Services panels.

Question: Is the Committee correct in understanding that, for the Student Support Services application review process, the Department of Education will reimburse non-Federal readers for their expenses and convene the panels in Washington, D.C. to review applications?

Answer: Non-Federal reader's actual expenses were paid, and reviews were conducted here in Washington.

Question: How many fiscal year 1986 Upward Bound applications will the Department of Education fund with the fiscal year 1987 appropriation due to errors by the Department to initially rejecting these applications?

Answer: The Department awarded grants for four fiscal year 1986 Upward Bound applications using fiscal year 1987 appropriations.

Question: How do you explain the apparent conflict between the Department of Education's justifications that state: "The Department continues to place a high priority on aiding the disadvantaged" and the Department's fiscal year 1987 revised request and fiscal year 1988 request for the Special Programs for the Disadvantaged under which the number of disadvantaged persons receiving services drops by over 75 percent, from over 475,000 to about 109,000? How will the over 360,000 disadvantaged persons formerly served by the Special Programs for the Disadvantaged receive information on available educational opportunities and assistance in returning to, or staying in, school?

Answer: Most of the reductions in services would result from the proposed elimination of the Talent Search and Educational Opportunity Centers programs, which are generally visited only once or twice by each person counted as a participant. These programs primarily provide academic and financial counseling services that duplicate State, local and institutional efforts and responsibilities.

Most high schools, as well as institutions of higher education, already have counselors whose role it is to provide many of the services which would typically be provided under the Special Programs. These services are standard recruitment activities, particularly as colleges increasingly compete for applicants. Some States currently are undertaking new programs to supplement these on-going activities, and some have longstanding programs. In Maryland, for example, the State Board of Higher Education has established an Early Intervention Project. Under this program, the State Board will provide a subsidy to local school systems. The program will focus on junior high school students. We believe that programs begun without Federal support and based on local recognition of a problem such as this will go far in increasing participation in higher education and improving the skill levels of those who do go on to higher education.

Question: In the light of recent education reform reports, the Governors' 1991 Report on Education and the Carnegie Foundation report College, The Undergraduate Experience in America, what do you see as the major issues and problems that might or should be addressed by the Fund for the Improvement of Postsecondary Education

projects? Have priority research areas for projects been established by the Fund? If so, please describe these for us.

Answer: Those issues and problems that the reform reports addressed overlap to a great extent those issues that were identified as priority areas by the Fund in the most recent funding competition. They include: curricular reform; making access meaningful; improving undergraduate education; reforming teacher education; reforming graduate and professional education; further developing the abilities of faculty and staff, as well as improving organizational development; making postsecondary education responsive to changes in the nation's economy; and developing the educational uses of technology including computers, television, and other educational media.

Question: What policy issues have been designated as high priority areas for projects funded by FIPSE in 1988?

Answer: The high priority issues for 1988 have not yet been determined.

INTERNATIONAL EDUCATION AND FOREIGN LANGUAGE STUDIES - DOMESTIC PROGRAMS

Question: Please provide us with a listing of all programs throughout the Federal Government that support education in foreign languages and area studies. Has total Federal funding in this area risen or fallen in recent years? What would be the effect on other Federal programs, such as those of the Department of Defense, of your proposed termination of Department of Education international education programs?

Answer: The most recent inventory of such programs was completed in 1980. It included a wide variety of programs, ranging from the language and area studies programs for employees of the Department of State and the Department of Defense to exchange programs sponsored by the U.S. Information Agency, the Agency for International Development, and the National Science Foundation, as well as the Departments of Defense, and Health and Human Services. More recent data on the number of programs or expenditures is not available.

The programs administered by the Department of Education are a relatively insignificant part of the Federal Government's efforts. The elimination of the Department's programs in this area would not have any significant impact on the programs administered by other Federal agencies.

Question: Even if one accepts the argument that there are relatively few specific subject areas that should receive direct Federal education assistance, why is international education not one of those areas, given the Federal Government's special responsibilities for foreign relations and national defense? Why do you assume that individual States and higher educational institutions have sufficient incentive to provide education especially in rare languages, without the supporting role of the Department of Education?

Answer: Many of these programs already receive most of their support from other sources. The National Resource Centers, for

example, receive only about 10 percent of their support from the Federal Government. Ninety percent of their funding comes from institutional and private sources, and this support would undoubtedly continue in the absence of Federal funding. The international programs that relate to the Federal Government's particular needs are sufficiently supported by those agencies responsible for fulfilling these needs, such as the Departments of State and Defense.

Question: How, and what amount of, funds appropriated under the Education for Economic Security Act are being used for foreign language education?

Answer: Of the $7,200,000 appropriated in 1987 for the Programs of National Significance under Title II of the Education for Economic Security Act, $1,800,000 is available to improve and expand instruction in critical foreign languages. These funds are appropriated under the Secretary's Discretionary Fund account.

Question: You have argued that foundations or other private sources could make up for the loss of Federal support of international education. However, recent reports have found that such sources have already substantially reduced their funding for other studies. Why do you believe that this trend will be reversed?

Answer: Support for international education comes not only from other Federal agencies, such as the State Department's Foreign Service Institute, the Defense Department's Defense Language Institute and International Military Education and Training Program, and the U.S. Information Agency's Fulbright-Hays programs and International Visitor's Programs, but from private sources as well. Examples of this support include: Citibank, N.A./Citicorp, which provided $53,000 to the Fletcher School of Law and Diplomacy (Tufts University), American Graduate School of International Management, Columbia University, Graduate School of International and Public Affairs and the Southern Center for International Studies; and the Chase Manhattan International Foundation, which provided $89,000 to the School of International Studies and 45 private undergraduate colleges, and $65,000 for fellowships to graduate schools which include international studies.

Such businesses and industries involved in international commerce have provided funds to support these efforts, and there have been recent reports in the media that indicate private giving has increased and will continue this upward climb.

Question: Does the Department of Education, or any other Federal agency, attempt to coordinate all Federal support of international education? If not, why not?

Answer: The Department works with other agencies involved with international exchange and education to coordinate Federal support in these areas. The United States Information Agency (USIA) has the responsibility for coordinating all international exchange activities. This assures that the Department's Fulbright-Hays programs are coordinated with the exchange activities of other Federal agencies. In addition, the Department participates in an Interagency Roundtable convened by the Department of Defense which assures that the other International Education programs are adequately coordinated.

Question: How do you avoid duplication of activities under the different Federal international education programs?

Answer: The programs administered by the Federal Government in the area of international education are so varied that duplication rarely occurs. However, the Department does work to assure that the same activities are not funded by other Federal agencies by consulting with them as necessary.

Question: Should all Federal international education programs be centrally administered, or at least coordinated?

Answer: We do not believe these programs should be centrally administered; they are now adequately coordinated. The international education and exchange programs supported by the Federal Government range across a wide range of agencies, missions, and programs, from public health to commerce to defense. To have such varied activities administered by one central Government agency would be extremely impractical.

Question: It would seem to be in the best interest of American businesses engaged in international trade, as well as the Departments of State and Defense, to support the maintenance and expansion of university foreign language and international studies program. How can, or should the Department of Education serve as an intermediary in making such support a reality?

Answer: We agree that American businesses should be involved in supporting the maintenance and expansion of university foreign language and international studies programs. We believe that it is clearly in their best interest to do so, but we do not believe that the Department of Education should play a role in facilitating this cooperation. Instead, the agencies, organizations, and businesses should work directly with institutions of higher education to expand and maintain the capacity to teach foreign languages and area studies. Because it is in their best interest, businesses have adequate incentives for such involvement without Federal funding.

Question: You have stated that grants to the National Resource Centers under Title VI of the Higher Education Act constitute only ten percent of their revenues. However, what percentage of students' educational costs are covered by Title VI fellowships?

Answer: We have no data available to use in determining the percentage of educational costs covered by the Foreign Language and Areas Studies fellowships.

Question: According to your Justifications, these fellowships average over $7,000, which would appear to represent a substantial proportion of these students' educational costs. How many students might have to terminate their graduate education as a result of losing their fellowships?

Answer: We do not believe that any student would have to give up his/her graduate study as a result of our proposed policy. Instead, these students could borrow under one or more of the Department's student loan programs, or obtain funds from work and other sources as do their peers.

INTERNATIONAL EDUCATION AND FOREIGN LANGUAGE
STUDIES - OVERSEAS PROGRAMS

Question: Please provide us with a listing of all Federal programs supporting international educational travel or exchange.

Answer: The following are the major Federal programs supporting international exchanges and travel. Inasmuch as all provide some form of education or training to participants, each is listed below.

o Agency for International Development

-- Participant Training Program

o Peace Corps

o National Science Foundation

o U.S. Information Agency

-- Academic Exchanges
-- International Visitors
-- Private Sector
-- President's International Youth Exchange Initiative
-- East-West Center
-- American Participants
-- Teacher Exchanges
-- International Educational Development

o Department of Defense

-- International Military Education and Training
-- Foreign Military Sales Programs

o Department of Education

-- Group Projects Abroad
-- Faculty Research Abroad
-- Doctoral Dissertation Research Abroad
-- Foreign Curriculum Consultants
-- Special Bilateral Projects

o Department of Health and Human Services

Alcohol, Drug Abuse, and Mental Health Administration:
-- Visiting Program
-- Guest Workers

Center for Disease Control:
-- Training Overseas by CDC Experts
-- Visiting Scientists

Food and Drug Administration:
-- Consultants
-- Visiting Scientists
-- Guest Workers

Health Resources and Services Administration:
-- Training in Foreign Countries
-- Exchange Opportunities
-- Guest Workers
-- AID Participant Trainees
-- WHO Fellowships

National Institutes of Health, Foreign Scientists:
-- Fogarty Scholars in Residence
-- Foreign Work/Study
-- International Research Fellowship Program
-- Visiting Program: Fellows, Associates and Scientists
-- Guest Researchers
-- International Fellowships in Neurosciences and in Tropical Diseases

U.S. Scientists:
-- Senior International Fellowship Program
-- French, Swedish, Swiss, and German Fellowships

Bilateral Agreements:
-- U.S.-U.S.S.R. Exchange in Health Sciences
-- U.S.-Romania Scientist Exchange

National Center for Health Statistics:
-- Training Overseas
-- Visitors and Guest Workers

In addition to these major exchange programs, the Federal Government has a number of other programs which provide more modest levels of support. These programs include those sponsored by the Japan-U.S. Friendship Commission, the Inter-American Foundation, and other Federal and quasi-governmental agencies.

The programs administered by the Department of Education are a relatively insignificant part of the Federal Government's efforts, particularly in the area of exchanges. In fiscal year 1984, the Department ranked last among the agencies supporting exchanges in terms of funding levels.

Of the funds provided for exchanges, the Department's support amounts to less than one percent of the total funds available. We do not believe the elimination of the Department's programs in this area would have any significant impact on the programs administered by other Federal agencies.

Question: Are the international exchange and education programs administered by the Department of State and the U.S. Information Agency also proposed for termination in your budget request?

Answer: No, these programs are not proposed for elimination.

Question: If not, why are those programs considered to be more worthy of continuation than the Department of Education programs?

Answer: These programs, along with a number supported by other Federal agencies, are tied more directly to specific foreign policy objectives of the United States. For this reason, they are proposed

for continuation while those administered by the Department of Education are proposed for elimination.

Question: In other contexts, such as the agreements at the Geneva summit meeting between President Reagan and Soviet leader Gorbachev or the President's Initiative for Youth Exchange, this Administration has supported international educational exchange. Why, then, do you propose terminating this program?

Answer: Exchange programs supported by other agencies are generally tied to specific foreign policy objectives of the United States, while those supported by this Department are not. As a result, we have proposed elimination of the Department of Education's programs.

Question: Which languages and area programs are studied with the support of IEFLS?

Answer: A list of languages and area programs studied with the support of IEFLS is being provided to the Committee as requested.

U.S. DEPARTMENT OF EDUCATION
Center for International Education
Washington, D.C. 20202

Advanced Training and Research Branch

July 1986

Table VI

Subjects Offered by Title VI Centers and Fellowship Programs, 1985-1986
by world area

CENTER	LANGUAGES TAUGHT	OTHER DISCIPLINE COVERAGE
EAST ASIA		
East Asian Studies Center Prof. Van Gessel, Director University of California Berkeley, CA 94720 (415) 642-2908	Buriat; Chinese: Cantonese, Classical, Mandarin; Japanese: Classical & Modern; Korean; Manchu; Monoglian; Tibetan; Uighur	Agricultural Economics, Anthropology, Archaeology, Architecture, Art History, Business, Conservation & Resources, Economics, Education, Environmental Design, Geography, History, Journalism, Law, Linguistics, Literature, Military Science, Music, Philosophy, Political Science, Religion, Sociology
Far Eastern Center Prof. William L. Parish, Jr. Director University of Chicago Chicago, IL 60637 (312) 962-8647	Chinese; Japanese: Classical & Modern	Art History, Business, Economics, Geography, History, Literature, Linguistics, Political Science, Psychology, Religion, Sociology
East Asian Language & Area Center Prof. Andrew Nathan, Director Columbia University New York, NY 10027 (212) 280-2828	Chinese : Classical & Modern; Japanese: Classical & Modern; Korean : Classical & Modern; Tibetan; Uyghur	Anthropology, Archaeology, Architecture, Art History, Business, Economics, Education, History, Journalism, Law, Linguistics, Literature, Music, Philosophy, Political Science, Religion, Sociology, Theater

CENTER	LANGUAGES TAUGHT	OTHER DISCIPLINE COVERAGE
China-Japan Center (UG) Prof. Sherman Cochran, Director Cornell University New York, NY 14853 (607) 256-6222	Chinese : Cantonese, Classical & Modern; Japanese: Classical & Modern; Korean	Agriculture, Agricultural Economics, Anthropology, Art History, Business, Dance, Economics, Film, History, Human Development, Law, Linguistics, Literature, Philosophy, Political Science, Religion, Sociology, Theater
** East Asian Center (UG) Prof. Tadanori Yamashita, Director Five Colleges, Inc. Amherst, MA 01004 (413) 538-2292	Chinese: Classical & Modern; Japanese: Classical & Modern	Anthropology, Art History, Economics, Film, Geography, History, Linguistics, Literature, Music, Philosophy, Political Science, Religion
Center for East Asian Studies Prof. Howard S. Hibbett, Director Harvard University Cambridge, MA 02138 (617) 495-2754	Chinese: Classical & Modern; Japanese: Classical & Modern; Korean; Manchu; Mongolian; Tibetan; Vietnamese	Anthropology, Archaeology, Art History, Economics, Fine Arts, History, Law, Linguistics, Literature, Music, Philosophy, Political Science, Religion, Sociology
* East Asian Studies Center Prof. Patricia Steinhoff, Director University of Hawaii Manoa, HI 96822 (808) 948-8543	Chinese: Cantonese, Classical, Mandarin; Japanese: Classical & Modern; Korean	Anthropology, Architecture, Art, Business, Communication, Dance, Drama, Economics, Education, Geography, History, Law, Linguistics, Literature, Music, Philosophy, Political Science, Public Health, Religion, Sociology, Theater
* Center for East Asian Studies Prof. Peter Schran, Director University of Illinois Urbana, IL 61801 (217) 333-4850	Chinese: Classical & Modern; Japanese; Korean	Anthropology, Architecture, Art, Business, Dance, Economics, Education, History, Law, Linguistics, Literature Music, Political Science, Religion, Sociology, Theater

CENTER	LANGUAGES TAUGHT	OTHER DISCIPLINE COVERAGE
* East Asian Studies Center Prof. Philip West, Director Indiana University Bloomington, IN 47401 (812) 335-3765	Chinese: Classical & Modern; Japanese; Korean	Anthropology, Economics, Fine Arts, Forensic Studies, Geography, History, Law, Linguistics, Literature, Philosophy, Political Science, Religion
* Center for East Asian Studies Prof. Daniel Bays, Director University of Kansas Lawrence, KS 66502 (913) 864-3849	Chinese: Clasical & Modern; Japanese; Korean	Anthropology, Art, Business, Communications, Economics, Geography, History, Law, Literature, Philosophy, Political Science, Religion, Sociology, Theater
* Asian Studies Center Prof. Warren I. Cohen, Director Michigan State University East Lansing, MI 48824 (517) 353-1680	Chinese	Anthropology, Art, Economics, Geography, History, Literature, Political Science, Religion, Theater
East Asian Center Prof. John Campbell, Director University of Michigan Ann Arbor, MI 48108 (313) 764-6307	Chinese, Japanese, Tibetan	Anthropology, Business, Economics, Geography, History, History of Art, Law, Linguistics, Literature, Music, Philosophy, Political Science, Religion, Sociology,
East Asian Center Prof. Chung-Min Chen, Director Ohio State University Columbia, OH 43212 (614) 422-9660	Chinese: Classical & Mandarin; Japanese: Classical & Modern; Korean	Anthropology, Archaeology, Art History, Business, Economics, Education, Geography, History, Linguistics, Literature, Philosophy, Political Science, Religion, Sociology
* East Asian Studies Prof. Victor Mair, Director University of Pennsylvania Philadelphia, PA 19104 (215) 898-8432	Chinese : Classical & Modern; Japanese: Classical & Modern; Korean	Anthropology, Archaeology, Architecture, Art, History, History of Science, Law, Literature, Linguistics, Political Science, Religion, Sociology

CENTER	LANGUAGES TAUGHT	OTHER DISCIPLINE COVERAGE
* East Asian Studies Program Prof. Rubie Watson, Director University of Pittsburgh Pittsburgh, PA 15260 (412) 624-5566	Chinese, Japanese, Korean	Anthropology, Archaeology, Art, Economics, Education, Geography, History, Law, Linguistics, Literature, Music, Philosophy, Political Science, Religion, Sociology
* East Asian Studies Prof. Martin Collcutt, Director Princeton University Princeton, NJ 08544 (609)452-4276	Chinese : Classical & Modern; Japanese: Classical & Modern	Archaeology, Art, Economics, History, Linguistics, Literature, Music, Philosophy, Political Science, Sociology
East Asian Studies Center Prof. Gordon Berger, Director University of Southern California Los Angeles, CA 90089 (213) 743-5080 and Prof. Fred Notehelfer, Director University of California Los Angeles, CA 90024 (213) 825-0007	Chinese: Cantonese, Classical & Modern; Japanese: Classical & Modern; Korean Chinese: Cantonese, Classical & Modern; Japanese: Classical & Modern; Mongolian; Sanskrit	Anthropology, Archaeology, Art, Business, Dance, Economics, Education, Geography, History, Law, Linguistics, Literature, Music, Philosophy, Political Science, Public Administration, Religion, Sociology, Theater
East Asian Center Prof. Albert E. Dien, Director Stanford University Stanford, CA 94305 (415) 723-3362	Chinese: Cantonese, Classical & Modern; Japanese: Classical & Modern; Korean; Nepali	Anthropology, Architecture, Art History, Business, Economics, Education, History, Linguistics, Literature, Philosophy, Political Science, Religion, Sociology
* East Asian Center P. Tomasson Jannuzi, Director University of Texas Austin, TX 78712 (512) 471-5811	Chinese: Classical & Modern; Japanese	Anthropology, Art, Business, Economics, Geography, History, Linguistics, Literature, Music, Political Science, Religion

CENTER	LANGUAGES TAUGHT	OTHER DISCIPLINE COVERAGE
East Asian Studies Center Prof. Jack Dull, Director University of Washington Seattle, WA 98195 (206) 543-4999	Chinese: Catonese, Classical & Modern; Japanese: Classical Modern; Korean, Manchu, Mongolian Tibetan	Anthropology, Architecture, Art History, Business, Economics, Geography, History, Law, Linguistics, Literature, Music, Philosophy, Political Science, Religion, Sociology, Theater, Urban Planning
East Asian Studies Program Prof. Solomon Levine, Director University of Wisconsin Madison, WI 53706 (608) 262-3643	Chinese: Classical, Mandarin; Japanese; Tibetan	Anthropology, Art History, Business, Communication Arts, Economics, Geography, History, Linguistics, Literature, Philosophy, Political Science, Religion, Sociology, Theater
Center for East Asian Studies Prof. Conrad Totman, Director Yale University New Haven, CT 06520 (206) 436-0627	Chinese: Classical & Modern; Japanese: Classical & Modern;	Anthropology, Economics, Forestry, History, History of Art, Linguistics, Literature, Philosophy, Political Science, Religion, Sociology
Southeast Asia Center Prof. Benedict Anderson, Director Cornell University Ithaca, NY 14850 (607) 255-2378	Burmese, Cambodian, Cebuano, Indonesian/Malay, Javanese, Khmer, Tagalog, Thai, Vietnamese	Agriculture, Anthropology, Art History, Business, Dance, History, Linguistics, Literature, Music, Political Science, Religion, Sociology
* Southeast Asia Center Prof. Wilhelm G. Solheim II Director University of Hawaii Honolulu, HI 96822 (808) 948-8439	Balinese, Burmese, Cebuano, Ilokano, Indonesian, Javanese, Khmer, Lao, Mon, Muong, Sundanese, Tagalog, Thai, Vietnamese, Visayan	Anthropology, Art, Dance, Education, Geography, History, Law, Linguistics, Literature, Music, Philosophy, Political Science, Public Health, Religion, Theater

CENTER	LANGUAGES TAUGHT	OTHER DISCIPLINE COVERAGE
Center for Southeast Asian Studies Prof. Karl Hutterer, Director University of Michigan Ann Arbor, MI 48109 (313) 764-0352	Burmese, Indonesian/Malay, Khmer (summer only), Old Javanese (Kawi), Pali, Thai, Tagalog	Anthropology, Archaeology, Art, Business, Economics, Geography, History, Linguistics, Literature, Music, Natural Resource Planning, Public Health, Regional/Urban Planning, Religion, Sociology
• Center for Southeast Asian Studies Prof. Ronald Provencher, Director Northern Illinois University De Kalb, IL 60115 (815) 753-1771	Indonesian, Javanese, Lao, Malay, Thai	Anthropology, Art, History, Literature, Music, Political Science, Public Administration, Sociology
• Center for Southeast Asian Studies Prof. Richard McGinn, Director Ohio University Athens, OH 45701 (614) 594-6039	Indonesian	Anthropology, Economics, Geography, History, Literature, Philosophy, Political Science
Center for Southeast Asian Studies Prof. Donald Emmerson, Director University of Wisconsin Madison, WI 53706 (608) 263-1755	Dutch, Indonesian, Javanese, Pali, Sanskrit, Thai	Agricultural Economics, Anthropology, Business, Economics, Geography, History, Journalism, Library Science, Literature, Music, Political Science, Public Health, Religion, Sociology, Theater, Urban/Regional Planning
INNER ASIA		
Uralic and Inner Asian Language and Area Center Prof. Denis Sinor, Director Indiana University Bloomington, IN 47401 (812) 335-0959	Azeri, Chagatai, Cheremis, Chuvash, Estonian, Finnish, Hungarian, Kazakh, Manchu, Mongolian, Mordvin, Ottoman, Persian, Sanskrit, Tatar, Tibetan, Turkic, Turkish, Tuvin, Uighur, Uzbek, Yakut, Zyrian	Anthropology, Art, Business, Economics, Geography, History, Linguistics, Literature, Music, Philosophy, Political Science, Religion, Sociology

CENTER	LANGUAGES TAUGHT	OTHER DISCIPLINE COVERAGE
SOUTH ASIA		
South Asian Language and Area Center Prof. Bruce Pray, Director University of California Berkeley, CA 94720 (415) 642-3608	Apabhramsa, Hindi, Pali, Prakrit, Rajasthani, Sanskrit, Tamil, Urdu, Vedic	Anthropology, Archaeology, Art History, Economics, Education, History, Linguistics, Literature, Music, Philosophy, Political Science, Public Health, Religion, Sociology
South Asian Language and Area Center Prof. Susanne H. Rudolph, Director University of Chicago Chicago, IL 60637 (312) 962-8606	Bengali, Gujarati, Hindi, Kannada, Malayalam, Marathi, Munda, Nepali, Oriya, Persian, Punjabi, Rajasthani, Sanskrit, Tamil, Urdu	Anthropology, Art, Economics, Geography, History, Linguistics, Literature, Philosophy, Political Science, Religion, Sociology
South Asian Center Prof. Theodore Riccardi, Director Columbia University New York, NY 10027 (212) 280-4662	Bengali, Hindi, Nepali, Pali, Persian, Prakrit, Sanskrit, Tibetan, Urdu	Anthropology, Art, Economics, Education, Geography, History, Linguistics, Literature, Music, Philosophy, Political Science, Religion, Urban Planning
South Asian Center Prof. Bonnie MacDougall, Director Cornell University Ithaca, New York 14850 (607)255-6370 and Prof. Robert Kearney, Director Syracuse University Syracuse, NY 13210 (315) 423-2552	Bengali, Hindi, Nepali, Pali, Persian, Sanskrit, Sinhala, Tamil, Telegu Hindi, Sanskrit	Anthropology, Architecture, Art, Dance, Geography, History, Linguistics, Literature, Political Science, Religion
*Program for South and West Asian Studies Prof. Marvin G. Weinbaum, Director University of Illinois Urbana, IL. 61801 (217) 333-0796	Hindi, Sanskrit, Urdu	Anthropology, Art, Economics, History, Linguistics, Literature, Political Science, Religion, Sociology

CENTER	LANGUAGES TAUGHT	OTHER DISCIPLINE COVERAGE
* Center for South and Southeast Asian Studies Prof. Karl L. Hutterer, Director University of Michigan Ann Arbor, MI 48108 (313) 764-0352	Avestan, Gujarati, Hindi, Pali, Persian, Prakrit, Sanskrit, Tibetan, Urdu	Anthropology, Art, Economics, History, Linguistics, Literature, Music, Political Science, Public Health, Religion, Sociology, Urban/Regional Planning
* Center for South and Southwest Asian Studies Prof. William W. Malandra, Director University of Minnesota Minneapolis, MN 55455 (612) 373-9834	Avestan, Baluchi, Bengali, Brahui, Gujarati, Hindi, Kondani, Marathi, Mundari, Pali, Persian, Prakrit, Punjabi, Sanskrit, Urdu	Anthropology, Architecture, Art, Economics, Geography, History, Linguistics, Literature, Music, Philosophy, Political Science, Religion
South Asian Language and Area Center Prof. Rosane Rocher, Director University of Pennsylvania Philadelphia, PA 19174 (215) 898-7475	Bengali, Gujarati, Hindi, Kannada, Malayalam, Marathi, Nepali, Pali, Pashtu, Punjabi, Persian, Prakrit, Sanskrit, Sinhala, Tamil, Telugu, Urdu, Vedic	Anthropology, Archaeology, Architecture, Art History, Business, Communications, Dance, Economics, Geography, History, Law, Linguistics, Literature, Music, Philosophy, Political Science, Regional Planning, Religion, Sociology
Center for South Asia (UG) Prof. P. Tomasson Jannuzi, Director University of Texas Austin, TX 78712 (512) 471-5811	Bengali, Gujarati, Hindi, Kannada, Malayalam, Marathi, Sanskrit, Sinhala, Tamil, Telugu, Urdu	Anthropology, Art, Business, Communications, Dance, Economics, Education, Geography, History, Law, Linguistics, Literature, Music, Philosophy, Political Science, Psychology, Religion
South Asian Studies Center (UG) Prof. Jeffrey Hopkins, Director University of Virginia Charlottesville, VA 22903 (804) 924-7146	Hindi, Pali, Persian, Sanskrit, Tibetan, Urdu	Anthropology, Art, Economics, Education, History, Literature, Political Science, Religion, Sociology

CENTER	LANGUAGES TAUGHT	OTHER DISCIPLINE COVERAGE
South Asia Center Prof. Frank Conlon, Director University of Washington Seattle, WA 98195 (206) 543-4800	Aprabhramsa, Avadhi, Braj, Gujarati Hindi, Kannada, Pali, Punjabi, Persian, Prakrit, Sanskrit, Tamil, Tibetan, Urdu, Vedic	Anthropology, Archaeology, Architecture, Art, Dance, Economics, Geography, History, Linguistics, Literature, Music, Philosophy, Political Science, Religion, Sociology
Center for South Asian Studies Prof. Frances A. Wilson, Director University of Wisconsin Madison, WI 53706 (608) 262-3012	Bengali, Dari (summer), Hindi, Nepali, Pali, Prakrit, Sanskrit, Tamil, Telugu, Tibetan, Urdu	Anthropology, Art, Economics, History, Linguistics, Literature, Philosophy, Political Science, Religion, Sociology, Textiles, Theater
MIDDLE EAST		
Middle Eastern Center (UC) Prof. Jerrold Green, Director University of Arizona Tucson, AR 85721 (602) 621-5456/7600	Akkadian, Arabic, Aramaic, Hebrew, Persian, Ugaritic, Urdu	Anthropology, Archaeology, Economics, Geography, History, Linguistics, Literature, Music, Philosophy, Political Science, Religion, Sociology
Middle East Center Prof. Ira Lapidus, Director University of California Berkeley, CA 94720 (415)642-2932	Akkadian, Arabic, Aramaic, Azeri, Coptic, Egyptian, Greek, Hebrew, Hittite, Iranian (Old), Pahlavi, Persian, Sumerian, Syriac, Turkish, Ugaritic, Uighur, Urdu, Uzbeg	Anthropology, Archaeology, Art, Economics, Geography, History, Law, Linguistics, Literature, Philosophy, Political Science, Sociology, Religion
Near Eastern Center Prof. Georges Sabagh, Director University of California Los Angeles, CA 90024 (213) 825-4668	Akkadian, Amharic, Arabic, Aramaic, Armenian, Azeri, Bashkir, Berber, Chaghatai, Coptic, Egyptian, Demotic, Georgian, Greek, Hebrew, Iranian (Old), Kazakh, Kirghiz, Kurdish, Ottoman, Persian, Phoenician, Sumerian, Syriac, Turkic, Turkish, Ugaritic, Uighur, Urdu, Uzbek, Vedic	Anthropology, Archaeology, Architecture, Art, Dance, Education, Geography, History, Law, Linguistics, Literature, Music, Philosophy, Political Science, Religion, Sociology

CENTER	LANGUAGES TAUGHT	OTHER DISCIPLINE COVERAGE
Middle Eastern Center Prof. John Woods, Director University of Chicago Chicago, IL 60637 (312) 962-8295	Akkadian, Arabic, Aramaic, Armenian, Azeri, Chaghatai, Coptic, Demotic, Egyptian (Old & Middle), Georgian, Hittite, Ottoman, Persian, Sumerian, Syriac, Tajik, Turkish, Turkman, Ugaritic, Uighur, Urdu, Uzbek	Anthropology, Archaeology, Art, Economics, Education, Geography, History, Law, Linguistics, Literature, Philosophy, Political Science, Religion
Middle East Center Prof. Richard Bulliet, Director Columbia University New York, NY 10027 (212) 280-3023	Arabic, Armenian, Hebrew, Ottoman, Persian, Tajik, Turkish, Uighur, Uzbek	Anthropology, Archaeology, Architecture, Art, Economics, Education, Geography, History, Law, Literature, Music, Philosophy, Political Science, Religion, Theater
Center for Middle Eastern Studies Dean Edward Keenar , Director Harvard University Cambridge, MA 02138 (617) 495-4334	Akkadian, Arabic, Aramaic, Armenian, Georgian, Hebrew, Ottoman, Pahlavi, Persian, Sumerian, Syriac, Turkic Old & Middle), Turkish, Uighur, Urdu	Anthropology, Archaeology, Architecture, Economics, Fine Arts, History, History of Science, Linguistics, Literature, Philosophy, Political Science, Religion, Sociology
Center for Near Eastern Studies Prof. Ernest McCarus, Director University of Michigan Ann Arbor, MI 48108 (313) 764-0350	Akkadian, Arabic, Aramaic, Avestan, Azeri, Chaghatai, Egyptian, Hebrew, Kurdish, Ottoman, Persian, Sumerian, Turkish, Ugaritic	Anthropology, Archaeology, Architecture, Art History, Economics, Education, Geography, History, Law, Linguistics, Literature, Music, Philosophy, Political Science, Religion
Near East Studies Center Prof. Stephen Dale, Director Ohio State University Columbus, OH 43212	Akkakian, Aramaic, Arabic, Greek, Hebrew, Persian, Turkish, Ugaritic	Anthropology, Archaeology, Art History, Business, Education, History, Literature,Philosophy, Political Science, Religion, Sociology
Near Eastern Studies Center Prof. R. Bayly Winder, Director New York University New York, NY 10003 (212) 598-2697 and	Akkadian, Arabic, Aramaic, Egyptian, Hebrew, Persian, Turkish, Ugaritic	Anthropology, Archaeology, Architecture, Economics, Fine Arts, History, Law, Linguistics, Literature, Music, Philosophy, Political Science, Religion, Sociology

CENTER	LANGUAGES TAUGHT	OTHER DISCIPLINE COVERAGE
Prof. L. Carl Brown, Director Princeton University Princeton, NY 08540 (609) 452-5487	Arabic, Hebrew, Ottoman, Persian, Syriac, Turkish,	
Middle East Center Prof. Brian Spooner, Director University of Pennsylvania Philadelphia, PA 19104 (215) 898-6335	Akkadian, Arabic, Aramaic, Armenian, Egyptian, Hebrew, Hittite, Ottoman, Pashto, Persian, Phoenician, Sumerian, Syriac, Turkish, Ugaritic, Urdu	Anthropology, Archaeology, Architecture, Art History, Economics, Education, Energy Policy, Geography, History, Law, Linguistics, Literature, Philosophy, Political Science, Religion, Sociology, Urban/Regional Planning
Southwest Asia, North Africa Program Prof. Don Peretz, Director State University of New York Binghamton, NY 13991 (607) 798-2212	Arabic, Hebrew	Anthropology, History, Literature, Political Science, Religion
Middle East Studies Center Prof. M. A. Jazayery, Director University of Texas Austin, TX 78712 (512) 471-3881	Arabic, Hebrew, Persian Turkish	Anthropology, Archaeology, Architecture, Art, Business, Economics, Geography, History, Linguistics, Literature, Music, Philosophy, Political Science, Religion, Sociology, Theater
Middle East Center Prof. Lee L. Bean, Director University of Utah Salt Lake City, UT 84112 (801) 581-7143	Akkadian, Arabic, Aramaic, Egyptian, Geez, Greek, Hebrew, Hittite, Mongolian, Persian, Sanskrit, Turkic, Turkish, Ugaritic	Anthropology, Archaeology, Architecture, Art, Economics, Education, Geography, History, Law, Linguistics, Literature, Music, Philosophy, Political Science, Religion, Sociology

CENTER	LANGUAGES TAUGHT	OTHER DISCIPLINE COVERAGE
Middle East Studies Center Prof. Jere Bacharach, Director University of Washington Seattle, WA 98195 (206) 543-6033	Akkadian, Arabic, Aramaic, Azerbaijani, Coptic, Hebrew, Kazakh, Khirghiz, Ottoman, Persian, Turkic, Turkish, Uighur, Uzbek	Anthropology, Archaeology, Architecture, Art, History, Economics, Education, Geography, History, Law, Linguistics, Literature, Music, Philosophy, Political Science, Religion, Sociology
Council on Middle East Studies Prof. Harvey Weiss, Director Yale University New Haven, CT 06520 (203)436-3536	Akkadian, Aramaic, Arabic, Avestan, Copic, Demotic, Egyptian, Ethiopic, Hebrew, Hittite, Northwest Semitic, Pahlavi, Persian, Phoenician, Ottoman, Sahidic, Sumerian, Syriac, Turkish, Ugaritic	Archaeology, Art, Economics, History, Linguistics, Literature, Philosophy, Political Science, Religion
USSR and EASTERN EUROPE • Department of Slavic Languages and Literature Prof. Robert Mathieson, Director Brown University Providence, RI 02912	Belorussian, Bulgarian, Czech, Finnish, Hungarian, Old Church Slavonic, Polish, Russian, Serbo-Croatian, Ukranian	History, Linguistics, Literature, Political Science
East European Center Prof. George Breslauer, Director University of California Berkeley, CA 94720 (415) 642-3290	Armenian, Azeri, Bulgarian, Buriat, Czech, Georgian, Hungarian, Kalmuck, Lithuanian, Macedonian, Old Church Slavonic, Polish, Romanian, Russian, Serbo-Croatian, Tadzhik, Tungus	Anthropology, Art History, Business, Economics, Film, Geography, History, Law, Library Science, Linguistics, Literature, Military Affairs, Music, Political Science, Sociology, Theater
Russian and East European Center Prof. Andrzej Korbonski, Director University of California Los Angeles, CA 90024 (213) 825-4998 and	Armenian, Bashkir, Bulgarian, Chagatay, Czech, Finnish, Hungarian, Lithuanian, Old Church Slavonic, Polish, Romanian, Russian, Serbo-Croatian, Ukranian, Uzbek, Yiddish	Anthropology, Art, Dance, Economics, Geography, History, Linguistics, Literature, Music, Political Science

CENTER	LANGUAGES TAUGHT	OTHER DISCIPLINE COVERAGE
Prof. Arnold Horelick, Director Rand Institute Los Angeles, CA 90406-2138 (213) 393-0411		
* East European and USSR Language and Area Center Prof. Norman W. Ingham, Director University of Chicago Chicago, IL 60637 (312) 962-8931	Albanian, Armenian, Bulgarian, Czech, Georgian, Greek, Lithuanian, Macedonian, Old Church Slavonic, Polish, Rumanian, Russian, Serbo-Croatian, Slovak, Turkish, Yiddish	Anthropology, Art, Economics, Geography, History, Linguistics, Literature, Music, Philosophy, Political Science, Religion, Sociology
Soviet and East European Language and Area Center Prof. William Harkins, Director Columbia University New York, NY 10027 (212) 280-3941	Armenian, Czech, Finnish, Greek, Hungarian, Old Church Slavonic, Permian, Polish, Russian, Serbo-Croatian, Tajik, Uighur, Uzbek, Yiddish	Anthropology, Art, Business, Economics, Education, Film, Geography, History, Law, Linguistics, Literature, Music, Philosophy, Political Science, Public Health, Religion, Sociology, Theater
* Committee on Soviet Studies Prof. George Gibian, Director Cornell University Ithaca, NY 14853 (607) 255-4047	Hungarian, Lithuanian, Polish, Romanian, Russian, Serbo- Croatian, Slovenian, Turkish, Ukranian	Economics, History, Linguistics, Literature, Political Science
Soviet and East European Studies Center Prof. Horace Lunt, Director Harvard University Cambridge, MA 02138 (617) 495-4037	Adzerbaijani, Armenian, Bulgarian, Czech, Finnish, Georgian, Greek, Hungarian, Kazakh, Kurdish, Lithuanian, Mongolian, Old Church Slavonic, Polish, Romanian, Russian, Serbo-Croatian, Slovak, Slovenian, Tadzhik, Tatar, Turkic, Turkish, Turkmen, Uighur, Ukrainian, Uzbek	Anthropology, Economics, History, Law, Linguistics, Literature, Music, Philosophy, Political Science, Sociology

CENTER	LANGUAGES TAUGHT	OTHER DISCIPLINE COVERAGE
Russian and East European Studies Center Prof. Ralph T. Fisher, Jr., Director University of Illinois Urbana, IL 61801 (217) 333-1244	Albanian, Bulgarian, Czech, Greek, Hungarian, Latvian, Lithuanian, Macedonian, Old Church Slavonic, Polish, Romanian, Russian, Serbo-Croatian, Slovenian, Turkish, Ukrainian, Uzbek	Accountancy, Agriculture, Anthropology, Architecture, Art, Economics, Education, Geography, History, Law, Library Science, Linguistics, Literature, Music, Philosophy, Physical Education, Political Science, Sociology, Theater
Russian and East European Studies Center Prof. Robert Campbell, Director Indiana University Bloomington, IN 47401 (812) 337-7309	Azeri, Bulgarian, Czech, Estonian, Finnish, Georgian, Greek, Hungarian Latvian, Lithuanian, Mongolian, Old Church Slavonic, Persian, Polish, Romanian, Russian, Serbo-Croatian, Slovene, Turkish, Ukrainian, Uzbek	Anthropology, Business, Economics, Education, Film, Fine Arts, Geography, History, Journalism, Law, Library Science, Linguistics, Literature, Music, Philosophy, Political Science, Sociology,
• Russian and East European Studies Center Prof. William C. Fletcher, Director University of Kansas Lawrence, KS 66502 (913) 864-4236	Bulgarian, Czech, German, Macedonian, Old Church Slavonic, Polish, Romanian, Russian, Serbo-Croatian, Slovenian, Ukranian	Anthropology, Art History, Economics, Geography, History, Linguistics, Literature, Philosophy, Political Science, Religion, Theater
Center for Russian and East European Studies Prof. William Rosenberg, Director University of Michigan Ann Arbor, MI 48108 (313) 764-0351	Armenian, Bulgarian, Czech, Finnish, Georgian, Hungarian, Lithuanian, Old Church Slavonic, Polish, Romanian, Russian, Serbo-Croatian, Ukrainian, Yiddish	Art, Anthropology, Economics, Education, Film, Geography, History, Journalism, Linguistics, Literature, Political Science, Sociology
Center for Russian and East Euroean Studies Prof. Leon I. Twarog, Director Ohio State University Columbus, OH 43212 (614) 422-8770	Albanian, Bulgarian, Czech, Greek, Hungarian, Macedonian, Old Church Slavonic, Polish, Romanian, Russian, Serbo-Croatian, Slovak, Ukrainian, Yiddish	Art History, Economics, Education, Film, Geography, History, Journalism, Law, Linguistics, Literature, Music, Philosophy, Political Science, Sociology, Theater

CENTER	LANGUAGES TAUGHT	OTHER DISCIPLINE COVERAGE
Center for Soviet and East European Studies Prof. Elliot Mossman, Director University of Pennsylvania Philadelphia, PA 19104 (215) 898-7358	Armenian, Azeri, Czech, German, Greek Hungarian, Persian, Polish, Romanian, Russian, Serbo-Croatian, Tajik, Turkish, Ukranian, Uzbek, Yiddish	Anthropology, Architecture, Business, Economics, Geography, History, History of Science, Law, Linguistics, Literature, Political Science, Public Health, Sociology
Russian & East European Studies (UG) Prof. Ronald Linden, Director University of Pittsburgh Pittsburgh, PA 15260 (412) 624-5557	Bulgarian, Czech, Hungarian, Old Church Slovonic, Polish, Romanian, Russian, Serbo-Croatian, Slovak, Slovenian, Ukranian	Archaeology, Art, Communication, Economics, Education, Geography, History, Linguistics, Literature, Music, Philosophy, Political Science
Russian and East European Center Prof. Alexander Dallin, Director Stanford University Stanford, CA 94305 (415) 497-9468	Armenian, Czech, Hungarian, Lithuanian, Old Church Slavonic, Russian, Serbo-Croatian	Architecture, Art, Economics, History, Linguistics, Literature, Music, Philosophy, Political Science, Sociology, Theater
Russian and East European Studies Center (UG) Prof. Paul Shoup, Director University of Virginia Charlottesville, VA 22903 (804) 924-3033	Bulgarian, Czech, Macedonian, Old Church Slavonic, Polish, Romanian Russian, Serbo-Croatian, Turkish, Ukranian, Yiddish	Anthropology, Architecture, Art, Economics, Environmental Sciences, History, Law, Linguistics, Literature, Music, Philosophy, Political Science, Sociology
Soviet Union and Eastern European Studies Center Prof. Harbert J. Ellison University of Washington Seattle, WA 98195 (206) 543-4854	Bulgarian, Czech, Hungarian, Old Church Slavonic, Polish, Romanian, Russian, Serbo-Croatian, Ukrainian, Uzbek	Anthropology, Art, Business, Communications, Economics, Education, Geography, History, Linguistics, Literature, Music, Philosophy, Political Science, Sociology, Urban Planning

CENTER	LANGUAGES TAUGHT	OTHER DISCIPLINE COVERAGE
• East European Studies Prof. James Bailey, Director University of Wisconsin Madison, WI 53706 (608) 262-9766	Czech, Finnish, Latvian, Lithuanian, Old Church Slavonic, Polish, Russian, Serbo-Croatian	Economics, History, Law, Linguistics, Literature, Political Science, Sociology
• Center for Russian and East European Studies Prof. Paul Bushkovitch, Director Yale University New Haven, CT 06520 (203) 436-0250	Bulgarian, Czech, Lithuanian, Old Church Slavonic, Polish, Russian, Serbo-Croatian	Anthropology, Art, Economics, History, Law, Linguistics, Literature, Music, Philosophy, Political Science, Religion, Theater
AFRICA		
African Studies Center Prof. John Harris, Director Boston University Boston, MA 02215 (617) 353-3673	Amharic, Arabic, Cape Verdian, Ewe, Kriolu (summer), Hausa, Kikonga (summer), Lingala, Mandinka/Bambara, Setswana, Sesotho, Swahili, Yoruba Zulu	Anthropology, Archaeology, Economics, Education, Geography, History, Law, Linguistics, Literature, Political Science, Religion, Sociology
African Studies Center Prof. Michael P. Lofchie, Director University of California Los Angeles, CA 90024 (213) 825-3779	Afrikaans, Amharic, Arabic, Bambara, Berber, Fula, Hausa, Swahili, Yoruba, Xhosa, Zulu	Anthropology, Archaeology, Architecture and Urban Planning, Art, Dance, Education, Geography, History, Literature, Music, Political Science, Public Health, Theater
Center for African Studies Prof. R. Hunt Davis, Director University of Florida Gainesville, FL 32611 (904) 392-2183	Amharic, Arabic, Chinyanji, Ewe, Fulani, Ga, Hausa, Ibo, Krio, Lingala, Shona, Swahili, Tem, Twi, Yoruba	Agriculture, Anthropology, Art, Economics, Geography, History, Law, Linguistics, Literature, Music, Political Science, Religion, Resource Management, Sociology

CENTER	LANGUAGES TAUGHT	OTHER DISCIPLINE COVERAGE
African Studies Center Prof. Donald E. Crummey, Director University of Illinois Urbana, IL 61801 (217) 333-6335	Afrikaans, Amharic, Arabic, Bantu, Bari, Berber, Hausa, Kipsigis, Lingala, Mandinka, Swahili, Tangale, Wolof, Yoruba	Agricultural Economics, Anthropology, Art, Economics, Education, History, Law, Library Science, Linguistics, Literature, Political Science, Religion, Sociology
Center for African Studies Prof. Patrick O'Meara, Director Indiana University Bloomington, IN 47401 (812) 335-6825	Afrikaans, Arabic, Bambara, Chichewe, Dyula, Efik, Ewe, Grebo, Hausa, Igbo, Kirundi, Krio, Kru, Lingala, Mende, Ndebele, Shona, Somali, Songai, Sotho, Susu, Swahili, Tamachag, Temne, Tir, Tswana, Twi, Wolof, Yoruba, Zulu	Anthropology, Art, Economics, Education, Geography, History, Journalism, Library Science, Linguistics, Literature, Music, Political Science, Public Affairs, Theater
African Studies Center Prof. David Wiley, Director Michigan State University East Lansing, MI 48824 (517) 353-1700	Acholi, Akan/Twi, Amharic, Arabic, Bambara, Chewa, Dyula, Fula, Fulfulde, Hausa, Igbo, Kikuyu, Kpelle, Krio, Lingala, Luganda, Mandingo, Maninka, Mende, Nyanja, Oromo, Shona, Somali, Swahili, West African Pidgin, Xhosa, Yoruba, Zulu	Agricultural Economics, Anthropology, Communications, Dance, Ecology, Economics, Education, Geography, History, Linguistics, Literature, Political Science, Religion, Sociology
Program of African Studies Prof. John Paden, Director Northwestern University Evanston, IL 60201 (312) 492-7323	Akan, Amharic, Arabic, Hausa, Krio/Pidgin, Maninka, Senefo, Swahili, Twi, Zulu	Anthropology, Architecture, Art History, Dance, Economics, Geography, History, Law, Literature, Management, Music, Political Science, Religion, Sociology
Center for African Studies Prof. James Gibbs, Director Stanford University Stanford, CA 94305 (415) 497-0295 and	Afrikaans, Amharic, Arabic, Bambara, Ewe, Hausa, Kikuyu, Lingala, Oromo, Setswana, Swahili, Twi, Wolof, Yoruba	Anthropology, Economics, Education, History, Linguistics, Literature, Music, Political Science, Religion, Sociology

CENTER	LANGUAGES TAUGHT	OTHER DISCIPLINE COVERAGE
Prof. Carl Rosberg, Director University of California Berkeley, CA 94720 (415) 642-0672	Arabic, Swahili	
African Language and Area Studies Center Prof. Jan Vansina, Director University of Wisconsin Madison, WI 53706 (608) 262-2380	Arabic, Bambara, Pula, Hausa, Kamba, Kikuyu, Krio, Luhya, Mende, Meru Pedi, Somali, Sotho, Swahili, Wolof, Xhosa, Zulu	Agriculture Economics, Anthropology, Art, Economics, Education, Geography, History, Journalism, Law, Linguistics, Literature, Music, Political Science, Sociology, Textiles
Center for African Studies Prof. John Middleton, Director Yale University New Haven, CT 06520 (203) 436-0253	Afrikaans, Bambara, Bamanakan, Creolu, Pula, Hausa, Igbo, Kituba, Kreol, Kuria, Lingala, Malagasy, Shona, Swahili, Twi, Wescos, Xhosa, Yoruba	Anthropology, Art, Economics, History, Linguistics, Literature, Music, Political Science, Public Health, Religion, Sociology
WESTERN EUROPE		
Western European Studies Center Prof. Elliot Zupnick, Director Columbia University New York, NY 10027 (212) 280-5400	Czech, Dutch, Finnish, Flemish, French, German, Greek, Italian, Polish, Portuguese, Russian, Serbo-Crotian, Slovak, Spanish, Swedish, Turkish, Yiddish	Anthropology, Archaeology, Architecture, Art, Business, City Planning, Economics, Education, Film, History, Law, Linguistics, Literature, Music, Philosophy, Political Science, Religion, Sociology, Theater
and Prof. Henry Wasser, Director City University of New York New York, NY 10036 (212) 790-4442	Czech, Danish, Dutch, French, German, Greek, Icelandic, Italian, Latin, Norwegian, Portuguese, Russian, Serbo-Croatian, Spanish, Swedish, Yiddish	

CENTER	LANGUAGES TAUGHT	OTHER DISCIPLINE COVERAGE
Western European Studies Center Prof. Sander Gilman, Director Cornell University Ithaca, NY 14850 (607) 256-6224	Dutch, French, German, Greek, Icelandic, Italian, Old Irish, Old Norse, Portuguese, Spanish, Swedish	Agricultural Economics, Anthropology, Archaeology, Architecture, Art, Business, City and Regional Planning, Economics, History, Industrial Relations, Law, Linguistics, Literature, Music, Philosophy, Political Science, Sociology
West European Studies Prof. Karl Heinz Schoeps University of Illinois Urbana, IL 61801 (217) 333-6663	Catalan, Danish, French, German Italian, Portuguese, Scandanavian, Spanish, Swedish, Yiddish	Accountancy, Agriculture, Architecture, Art, Business, Communications, Film, Geography, History, Law, Linguistics, Literature, Music, Philosophy, Political Science, Religion, Theater, Urban and Regional Planning
West European Studies Center Prof. Norman Furniss, Director Indiana University Bloomington, IN 47401 (812) 335-7695	Catalan, Danish, Dutch, Finnish, French, German, Icelandic, Italian, Portuguese, Spanish, Turkish	Anthropology, Business, Economics, Fine Arts, Film, Geography, History, Journalism, Law, Linguistics, Literature, Philosophy, Political Science, Religion, Sociology, Theater
Western European Studies Center Prof. Michael Metcalf, Director University of Minnesota Minneapolis, MN 55455 (612) 373-2680	Celtic, Danish, Dutch, Finnish, French, German, Greek, Icelandic, Irish, Italian, Norwegian, Portuguese Spanish, Swedish	Agriculture, Anthropology, Architecture, Art, Communications, Economics, Education, Film, Geography, History, History of Science, Journalism, Law, Linguistics, Literature, Music, Philosophy, Political Science, Sociology, Theater
LATIN AMERICA		
Latin American Center Prof. Johannes Wilbert, Director University of California Los Angeles, CA 90024 (213) 825-4571	Portuguese, Nahuatl, Quechua, Spanish	Anthropology, Art, Business, Dance, Economics, Education, Geography, History, Law, Library Science, Linguistics, Literature, Music, Political Science, Public Health, Sociology, Theater, Urban Planning

CENTER	LANGUAGES TAUGHT	OTHER DISCIPLINE COVERAGE
*Institute for Latin American and Iberian Studies Prof. Jean Franco, Director Columbia University New York, New York 10027 (212) 280-3791	Portuguese, Spanish	Anthropology, Architecture, Art, Business, Economics, Geography, History Law, Literature, Political Science, Urban Planning
Center for Latin American and Caribbean Studies (UG) Prof. Paul B. Goodwin, Director University of Connecticut Storrs, Connecticut 06268 (203) 486-4964	Portuguese, Quechua (Summer), Spanish	Agriculture, Anthropology, Archaeology, Art, Biological Sciences, Business, Economics, Education, Geography, History, Law, Linguistics, Literature, Political Science, Public Health, Sociology
Center for Latin American Studies Prof. Terry L. McCoy, Director University of Florida Gainesville, FL 32601 (904) 392-0375	Aymara, Haitian Creole, Portuguese, Spanish	Agricultural Economics, Anthropology Art, Botany, Economics, Education, Geography, History, Linguistics, Literature, Music, Philosophy, Political Science, Sociology
Center of Latin American Studies Prof. Enrique Mayer, Director University of Illinois Urbana, IL 61801 (217) 333-3182 and Prof. Don S. Rice, Director University of Chicago Chicago, Illinois 60637 (312) 962-9741	Portuguese, Quechua, Spanish Ge, Nahuatl, Portuguese, Quiche and Yucatec Maya, Spanish, Tarascan	Agricultural Economics, Anthropology, Art History, Biology, Business, Ecology Economics, Education, Forestry, Geography, History, Law, Linguistics, Literature, Music, Political Science, Religic Sociology

CENTER	LANGUAGES TAUGHT	OTHER DISCIPLINE COVERAGE
*Center for Latin American and Caribbean Studies Prof. Dennis Conway, Director Indiana University Bloomington, IN 47405 (812) 335-9097	Catalan, Haitian Creole, Nahuatl, Portuguese, Quechua, Spanish, Zapotec	Anthropology, Art, Geography, History, Library Science, Linguistics, Literature, Music, Political Science
Latin American Center Prof. Charles L. Stansifer University of Kansas Lawrence, KS 66045 (913) 864-4213	Guarani, Haitian Creole, Portuguese, Spanish	Anthropology, Economics, Geography, History, Linguistics, Literature, Music, Political Science, Sociology
Center for Latin American Studies Prof. Gilbert Merkx, Director University of New Mexico Albuquerque, NM 87131 (505) 277-2961	Portuguese, Quechua, Spanish	Anthropology, Archaeology, Architecture, Art, Business, Dance, Economics, Geography, History, Journalism, Law, Linguistics, Literature, Philosophy, Political Science, Regional Planning, Sociology
and Prof. Louis R. Sadler, Director New Mexico State University Las Cruces, NM 88003 (505) 646-3524	Portuguese, Spanish	
Latin American Studies Center Prof. Mitchell A. Seligson, Director University of Pittsburgh Pittsburgh, PA 15260 (412) 624-5563	Aymara, Portuguese, Quechua, Quiche and Yucatec Maya, Spanish	Agriculture, Anthropology, Archaeology, Art, Business, Economics, Education, Geography, History, Law, Library Science, Linguistics, Literature, Music, Political Science, Public Administration, Public Health, Religion, Sociology, Theater
and Prof. Thomas H. Holloway Cornell University Ithaca, NY 14850 (607) 256-3345	Mayan, Portuguese, Quechua, Spanish	

CENTER	LANGUAGES TAUGHT	OTHER DISCIPLINE COVERAGE
Latin American Studies Center (UC) Prof. Thomas M. Davies, Director San Diego State University San Diego, CA 92101 (714) 265-6685	Portuguese, Spanish	Anthropology, Art, Business, Economics, Geography, History, Journalism, Linguistics, Literature, Music, Philosophy, Political Science, Sociology, Urban Planning
and		
Prof. Paul Drake, Director University of California San Diego, CA 92093 (619) 452-6049	Haitian Creole, Portuguese, Spanish	
Latin American Studies Center Prof. George Collier, Director Stanford University Stanford, CA 94305 (415) 497-4444	Mayan, Nahuatl, Portuguese, Quechua, Spanish	Agricultural Economics, Anthropology, Archaeology, Architecture, Art, Business, Communications, Dance, Economics, Education, Food Resources, Geography, History, Law, Library Science, Linguistics, Literature, Music, Political Science, Public Health, Regional and Urban Planning, Religion, Sociology
and		
Prof. Brent Berlin, Director University of California Berkeley, CA 94720 (415) 642-2088	Campa, Mixtec, Portuguese Quechua, Spanish	
Latin American Studies Center Prof. William Glade, Director University of Texas Austin, TX 78712 (512) 471-5551	Mayan, Nahuatl, Quechua, Portuguese, Spanish	Anthropology, Art, Business, Economics, Geography, History, Journalism, Law, Library Science, Linguistics, Literature, Music, Political Science, Public Health, Regional Planning, Sociology
Latin American Studies Center Prof. Richard E. Greenleaf, Director Tulane University New Orleans, LA 70118 (504) 865-5164	Mayan, Nahuatl, Portuguese, Spanish	Anthropology, Archaeology, Architecture, Art, Biology, Business, Communications, Economics, Education, History, Law, Linguistics, Literature, Philosophy, Political Science, Public Health, Sociology

CENTER	LANGUAGES TAUGHT	OTHER DISCIPLINE COVERAGE
* Center for Latin American and Iberian Studies Prof. Enrique Pupo-Walker, Director Vanderbilt University Nashville, TN 37235 (615) 322-7311	Nahuatl, Portuguese, Spanish	Anthropology, Art, Economics, Education, History, Law, Linguistics, Literature, Political Science, Religion, Sociology
Center for Latin American Studies Prof. Barbara Stallings , Director University of Wisconsin (for the system) Madison, WI 53706 (608) 262-2811	Portuguese, Quechua, Spanish	Agricultural Economics, Anthropology, Archaeology, Architecture, Art, Business, Dance, Economics, Education, Geography, History, Journalism, Law, Linguistics, Literature, Music, Political Science, Public Health, Religion, Sociology, Theater
and		
Prof. Donald Shea, Director University of Wisconsin Milwaukee, WI 53203 (414) 963-4401	Portuguese, Spanish	
¶ Council on Latin American Studies Prof. Colin Bradford, Director Yale University New Haven, CT 06520 (203) 436-0259	Portuguese, Spanish	Anthropology, Archaeology, Architecture, Art, Communications, History, Literature, Political Science
CANADA & ♭ Canadian Studies Center Prof. Richard Leach, Director Duke University Durham, NC 27706 (919) 684-2765	French	Anthropology, Business, Communications, Economics, Education, Environmental Studies, Health Administration, History, Law, Literature, Political Science, Sociology

CENTER	LANGUAGES TAUGHT	OTHER DISCIPLINE COVERAGE
** Prof. Victor Konrad, Director University of Maine Orono, ME 04469 (207) 581-4222 and	French	Anthropology, Archaeology, Art, Business, Communications, Economics, Education, Environmental Studies, Film, Geography, Geology, History, Journalism, Law, Linguistics, Literature, Music, Political Science, Social Work, Sociology, Theater
** Canadian Studies Center Prof. Edward J. Miles, Director University of Vermont Burlington, VT 05401 (802) 565-3062 and	French	
** Prof. Richard Beach, Director State University of New York Plattsburgh, NY 12901 (518) 564-2086	French	
** Committee for Canadian-American Studies Prof. Victor Howard, Director Michigan State University East Lansing, MI 48824 (517) 353-9349 and	French	Anthropology, Business, Geography, History, Law, Literature, Political Science
** Center for Canadian Law Prof. John R. Reifenburg, Director Detroit School of Law Detroit, MI 48201 313) 965-0150		

CENTER	LANGUAGES TAUGHT	OTHER DISCIPLINE COVERAGE
INTERNATIONAL STUDIES		
International Studies Center Dean Graham Irvin, Director Columbia University New York, NY 10027 (212) 280-3023		Anthropology, Art, Business, Communications, Economics, Education, Film, Geography, History, Law, Linguistics, Literature, Management, Music, Political Science, Public Health, Religion, Sociology, Theater, Urban Planning
* Center for International Community Health Studies Dr. Stephen Schensul, Director University of Connecticut Farmington, CT 06032 (203) 674-2555		Anthropology, Economics, Geography, Health Policy, Health Sciences, History, Nursing, Nutrition, Political Science, Public Health, Sociology
* Center for Study of World Food Issues Prof. Edwin Oyer, Director Cornell University Ithaca, NY 14850 (617) 255-2283		Agriculture, Agronomy, Animal Science, Anthropology, City and Regional Planning, Communications, Economics, Education, Food Science, Geography, Landscape Architecture, Nutritional Science, Political Science, Pomology, Sociology
* Intercultural Resource Center (UC) Dean James E. Alatis, Director Georgetown University Washington, D.C. 20057 (202) 625-4301		Anthropology, Business, Communications, Demography, Economics, Finance, Geography, History, Linguistics, Literature, Philosophy, Political Science, Religion, Sociology

CENTER	LANGUAGES TAUGHT	OTHER DISCIPLINE COVERAGE
* Center for Interpretation and Translation Dean James E. Alatis, Director Georgetown University Washington, D.C. 20057 (202) 625-4301 and * Prof. Marilyn G. Rose, Director State University of New York Binghamton, NY 13901 (607) 798-6763		Anthropology, Business, Communications, Demography, Economics, Education, Finance, Geography, History, Linguistics, Literature, Management, Philosophy, Political Science, Religion, Sociology, Translation
Center for International and Comparative Studies Prof. Michael McNulty, Director University of Iowa Iowa City, IA 52242 (319) 353-7440		Anthropology, Art, Business, Communications, Economics, Education, Geography, History, Journalism, Law, Linguistics, Literature, Music, Philosophy, Political Science, Public Health, Religion, Sociology, Theater
Center for International Affairs Dean Robert Lystad, Director School of Advanced International Studies John Hopkins University Washington, D.C. 20036 (202)785-6229		Anthropology, Business, Economics, Energy Studies, Finance, History, Law, Political Science, Public Health, Sociology
Center for International Development Studies Prof. Tom W. Carroll, Director Michigan State University East Lansing, MI 48824 (517) 353-5925		Agricultural Economics, Anthropology, Communications, Ecology, Economics, Education, Forestry, Geography, History, Journalism, Linguistics, Nutrition, Political Science, Religion, Sociology, Urban Studies

CENTER	LANGUAGES TAUGHT	OTHER DISCIPLINE COVERAGE
Center for International Management Prof. Claire Gaudiani, Director University of Pennsylvania Philadelphia, PA 19104 (215) 898-1215		Accounting, Anthropology, Business, City and Regional Planning, Communications, Economics, Energy Policy, Finance, Geography, History, Industrial Relations, Law, Literature, Management Political Science, Religion, Resources Management, Sociology
International Studies Center Prof. Michael O. Pry, Director University of Southern California Los Angeles, CA 90007 (213) 743-6516 and Center for International and Strategic Affairs Prof. Michael Intriligator, Director University of California Los Angeles, CA 90024 (213) 825-0604		Anthropology, Business, Economics, Education, Geography, History, Journalism, Law, Marine Affairs, Military Science, Philosophy, Political Science, Public Administration, Religion, Sociology
International Studies Center Dean Rosemarie Rogers, Director Tufts University (Fletcher School of Law and Diplomacy) Medford, MA 02155 (617) 628-7010		Business, Communications, Economics History, Law, Literature, Nutrition Political Science, Sociology
International Studies Center Prof. Donald Hellman, Director University of Washington Seattle, WA 98195 (206) 543-4370		Anthropology, Architecture and Urban Planning, Business, Communications, Economics, Environmental Studies, Forestry, Geography, History, Law, Linguistics, Political Science, Public Health, Religion, Sociology

CENTER	LANGUAGES TAUGHT	OTHER DISCIPLINE COVERAGE
** Center for International Studies Prof. William Poltz, Director Yale University New Haven, CT 06520 (203)436-3416		Anthropology, Economics, Forestry, History, Law, Management, Political Science, Public Health, Religion, Sociology
PACIFIC ISLANDS		
** Pacific Islands Studies Center Prof. Robert Kiste, Director University of Hawaii Honolulu, HI 96822 (808) 948-7700	Hawaiian, Marquesan, Samoan, Tahitian, Tuamotuan	Anthropology, Archeology, Art, Dance, Ecological Studies, Education, Geography, History, Linguistics, Music, Political Science, Religion, Sociology, Regional and Urban Planning

* Fellowships only
** Center only
Institutions not asterisked receive both Centers and Fellowships support.

LEGAL TRAINING FOR THE DISADVANTAGED

Question: Is the Department of Education's request to rescind the $1.5 million fiscal year 1987 appropriation for the Legal Training for the Disadvantaged program and its request for no funding in fiscal year 1988 predicated upon the current level of minority representation in legal education and the legal profession?

Answer: The request to eliminate Federal funding for Legal Training for the Disadvantaged is based on the need to eliminate low priority programs to help reduce the Federal budget deficit.

We believe that without further Federal support, this program would continue to attract financial support from private sources for its activities. Furthermore, grants and loans would be available to disadvantaged individuals through the Department's student financial assistance programs.

Question: Are minority students adequately represented in the legal profession? Please distinguish among Blacks, Hispanics, Pacific Islanders, and other minorities in your response.

Answer: Since the Legal Training for the Disadvantaged program first received Federal funds in 1968, minority representation in the legal profession has increased from a total in 1968 of 1,607 (1,245 Black, 330 Hispanic, 32 Native Americans) to a total in the 1985-86 academic year of 11,871 (5,967 Black, 3,496 Hispanic, 1,962 Asian and Pacific Islanders, 446 Native Americans). In addition, minority student enrollment in law schools has averaged 9 percent over the last five years.

GRADUATE EDUCATION

Question: The Department requests funding for only one of the five higher education scholarship and fellowship programs. These fellowships are targeted for special purposes, such as encouraging minorities to pursue graduate study in fields in which they are underrepresented, and encouraging students to become teachers or professors in the arts and humanities. Your rationale for these terminations is that student financial assistance is available from regular Department programs, making these fellowships unnecessary.

If these programs are terminated, what special tools will we have--for example--to urge minorities to pursue study in fields in which they are underrepresented?

Answer: Title IV student financial assistance programs are not targeted to any single minority group, but rather were established to assist individuals with financial need. These sources have grown dramatically in recent years and are a priority in the Department's budget request for fiscal year 1988. The Department has proposed substantial increases in student loan limits for graduate and professional students. Consequently, we do not believe that eliminating funding for some of these very small fellowship programs will result in any graduate student being without the financial means to pursue his or her education.

ROBERT C. BYRD HONORS SCHOLARSHIPS

Question: What justification is there for recommending funding for the Robert C. Byrd Honors Scholarships under which scholarships are awarded on the basis of outstanding academic achievement and potential when these factors are not considered in making awards under other Federal student assistance programs in the Department of Education?

Answer: To promote student excellence and achievement by recognizing exceptionally able students, the Department should provide to undergraduate students, in addition to need-based student aid programs, a limited number of awards which are based on academic achievement.

Question: Why do you propose that this program be funded when you are proposing significant reductions in the Pell Grants program and elimination of funding for the campus-based programs that are awarded on the basis of financial need?

Answer: The $8 million requested for the program is very modest when compared to the funding for the other student assistance programs and constitutes our only effort at the undergraduate level to reward and recognize exceptionally able students.

Question: How many scholarships would be funded in each congressional district at the requested level of funding?

Answer: The authorizing legislation provides that 10 individuals are to be selected from the residents of each congressional district. However, the Appropriations Act of 1987 for the Department (Public Law 99-500) waived that procedure. The conferees provided that the number of scholarships to a State be based on the school-age population in the State. The program regulations provide that the amount allotted to each State would be $1,500 multiplied by the number of scholarships which bears the same ratio to the total number of scholarships made available to all States as the State's school-age population bears to the total school-age population in all participating States with the exception that no State is to receive fewer than 10 scholarships.

Question: What percentage of the appropriation for the Byrd Scholarships will be used for State administration of the program? How does this compare with other Federal postsecondary and elementary and secondary education programs?

Answer: The administrative allowance cost, by statute, for each State under this program is $10,000 plus 5 percent of the amount for which the State is eligible under the allotment formula. The allowance for this program is somewhat higher than those generally allowed under the Department's student aid programs.

Question: What allocation formula does the Department propose to use for distributing the 1988 scholarship funds?

Answer: State agencies will receive grants based on (1) $1,500 multiplied by the number of scholarships (based on the school-age population in the State); plus (2) an administrative allowance equal to $10,000 plus 5 percent of the amount to which the State is eligible under (1). This formula differs from the formula specified in the authorizing legislation since it reflects changes made under the Department's Appropriations Act for fiscal year 1987 (Public Law 99-500).

Question: Why is it appropriate to fund the Byrd Scholarships, but not the other four scholarship/fellowship programs operated by the Department?

Answer: The Administration has requested funding for this program because it allows the Department to recognize outstanding student achievement by providing student financial assistance at the undergraduate level based solely on merit.

CONGRESSIONAL TEACHER SCHOLARSHIPS

Question: In view of the problems that many local school districts are having in securing qualified teachers, how do you justify your statements that "there is no manpower shortage or other national need" to support funding for the Congressional Teacher Scholarships?

Answer: In a recent report on Teachers in Elementary and Secondary Education for the 1983-84 school year, the Center for Education Statistics reports that there was an estimated shortage of 3,965 teacher candidates by field of assignment in the Nation's schools, which represents shortages in less than 0.2 percent of all teaching positions.

The Congressional Teacher Scholarship program is unlikely to have a significant impact on this small teacher shortage. Because it is focused on high school seniors, most of whom are not ready to commit themselves to a specific career, and because of the repayment requirements in cases where the scholarship recipient does not teach for the necessary period of time, the program is likely to be attractive only to students who are so firmly committed to teaching that they would do so without the incentive of a scholarship. The Congressional Teacher Scholarship program is similar to those loan forgiveness programs reviewed by the College Board in a recent report. The College Board suggests that such programs are unlikely to reach their goals.

We believe that more emphasis should be placed on the quality of teachers employed. The proposed Christa McAuliffe Teacher Training and Improvement program represents a more appropriate Federal role in encouraging improvement in the teaching profession.

Question: What action is the Department taking to provide additional information on current and projected teacher shortages?

Answer: The Department has requested funds in its fiscal year 1988 budget to enable the Center for Education Statistics to conduct a major study of teacher supply and demand. Congress specifically called for such a study in the Higher Education Amendments of 1986.

This study, if funded, will be conducted in the winter of 1988 with data to be available in late 1988. The study will provide data for estimating teacher demand, turnover, and sources of supply, along with indicators of shortage. These data will depict the components of demand by education level, by type of district, and, for most States, by teaching field. It will also allow us to track the supply and the composition of the teaching force, to estimate turnover and to support projections of supply and demand. The Center is proposing to conduct this study biennially to respond to its mandate for providing the Nation with detailed data on teacher supply and demand.

Question: Why are the teacher shortage estimates from the National Education Association so much greater than those from the Department of Education's Center for Statistics?

Answer: We cannot verify any NEA estimates on teacher shortages. Once the Center finishes this major study on teacher supply and demand, however, we will all have more current and complete information.

Question: Why do you contend that it is inappropriate for Federal grant programs to influence career decisions for persons to become teachers, but not inappropriate for Federal funds to be used for various grant and scholarship programs to encourage persons to enter military or certain health service careers?

Answer: The Department believes that the target group (17- to 18-year-old high school graduates) is generally not seriously committed to pursuing a particular career. Many students change their career goals more than once during their stay in college. Such an individual would probably not accept a Congressional Teacher Scholarship grant that would become an interest bearing loan if the student changed his/her career goal and thus did not meet the teaching commitment requirements. Therefore, it is unlikely that the program would encourage new students to pursue teaching careers. Rather, it is likely that the program would only attract those students already strongly motivated to pursue a career in teaching.

Question: When one considers the low salaries for beginning teachers and the proposals for five and six year teacher preparation programs, on what data do you base your contentions that a sufficient number of quality college students currently are choosing, and will continue to choose, teaching as a career?

Answer: The most recent data available from the Center for Education Statistics does not show a great turnover in the teaching profession. In 1983, the 212,500 teachers newly hired by employing agencies and schools represented 7.9 percent of the total elementary and secondary teaching force. The issue of quality is a more difficult one and we believe it is being addressed more directly by the States, with many of them initiating testing for teachers and evaluating pay scales and other inducements to attract and keep good teachers. Finally, we believe that our Christa McAuliffe Teacher Training and Improvement Act proposal is the most appropriate vehicle for Federal involvement on this issue.

PATRICIA ROBERTS HARRIS GRADUATE FELLOWSHIPS

Question: Why is the Department of Education requesting a rescission of the fiscal year 1987 funds and no fiscal year 1988 funds for the Patricia Roberts Harris Graduate Fellowships, the Department's grant program designed to help minorities and women undertake graduate level studies in fields in which they are underrepresented?

Answer: To reduce the Federal deficit and subsequent Treasury borrowing needs, the Administration proposes to curtail Federal expenditures for nonessential, discretionary purposes, such as the Patricia Roberts Harris Graduate Fellowships. Currently, there are a wide variety of Federal and non-Federal sources of financial support available for minorities and women pursuing graduate and professional study. These include Federal student aid and support from post-secondary institutions, foundations, and other private sources. Other programs are more appropriately designed to provide Federal aid. Needy graduate students are currently eligible for assistance under the Department's Guaranteed Student Loan program. The National Science Foundation supports graduate study in the scientific fields, including a special program for minorities.

Question: Would termination of this program reduce even the "minimal progress" that, according to a recent working paper prepared for the National Research Council, Blacks and Hispanics have made in entering graduate and professional institutions?

Answer: The proposed elimination of the Patricia Roberts Harris Fellowship program would not contribute negatively to the progress of minorities and women who wish to pursue graduate study in fields in which they are underrepresented. These individuals will continue to be eligible for support under various Department-supported and other non-Federal student financial assistance programs.

PATRICIA ROBERTS HARRIS PUBLIC SERVICE FELLOWSHIPS

Question: What information do you have to support your statement that there is no shortage of highly training applicants for public service employment?

Answer: There has been a significant increase in the number of persons receiving advanced degrees in public administration. Since 1970-71, the number of persons receiving masters degrees in public administration has increased by more than 350 percent and the number of persons receiving doctorates in this field increased by more than 275 percent. This has resulted in more than 6,500 persons receiving masters and more than 130 persons receiving doctorate degrees in academic year 1981-82, the most recent year for which data are available.

In addition, Department of Education data shows that Federal, State and local government offices that are hiring are recruiting significantly more persons with degrees in specialized disciplines such as law, economics, and engineering rather than persons with general training in public administration.

Question: Is this statement also true for the supply of minority and female applicants and other underrepresented groups?

Answer: In 1980-81, the most recent year for which data are available, the percentages of minorities and women obtaining master's degrees in Public Affairs and Services were higher than the percentages of minorities and women receiving master's degrees in all fields.

	All Master's Degrees	Master's Degrees in Public Affairs and Services
Minority Recipients	10.5%	14.5%
Women Recipients	50.5%	55.4%

Question: Are Blacks and other minorities represented in graduate schools in proportion to their representation among college graduates?

Answer: The most recent data compiled by the Office for Civil Rights (1985) and the Center for Education Statistics show the following statistics on the representation of Blacks and other minorities among all bachelor's degrees conferred and in higher education at the graduate and the first-professional degree level.

Representation of Blacks and Minorities in Graduate Education

	Bachelor's Degrees		Full-time Enrollment			
			Graduate		First Professional	
	Number	Percent	Number	Percent	Number	Percent
American Indian/Alaskan Native	3,593	0.3%	1,471	0.4%	863	0.4%
Black Non-Hispanic	60,673	6.4%	18,077	4.9%	11,404	4.8%
Asian or Pacific Islander	18,794	2.0%	13,362	3.6%	8,592	3.6%
Hispanic	21,832	2.3%	9,650	2.6%	7,126	3.0%
Total All Minorities	104,892	11.0%	42,560	11.5%	27,985	11.8%
Total White and Minorities	934,800*	100.0%	368,891	100.0%	236,854	100.0%

*Includes non-resident aliens.

JACOB K. JAVITS FELLOWS

Question: Why do you contend that it is inappropriate for Federal grant programs such as the Jacob K. Javits Fellows to influence career decisions for persons to pursue Ph.D. degrees in the arts, humanities, or social sciences when Secretary Bennett has been emphasizing the importance of the humanities in collegiate studies and when researchers have projected a shortage of college and university faculty in the 1990s?

Answer: It is an appropriate Federal role to encourage universities to re-emphasize the humanities, and students to enroll in such courses. It is not appropriate that such "encouragement" include the provision of substantial amounts of Federal funds for individual students. The Department of Education should provide general student aid; substantive fellowship aid should be left to other appropriate Federal agencies (i.e., National Endowment for the Humanities, National Education Association, etc.).

At this time of budget reductions and fiscal restraint, it is particularly inappropriate to provide financial support for narrowly focused categorical student assistance programs. Students needing support to pursue their graduate studies have available to them other student assistance programs including the Guaranteed Student Loan program, the Perkins Loan program, Supplemental Loans for Students and Parent Loans for Undergraduate Students.

Question: Given the length of time required for completion of graduate study, and the pay scale for beginning college professors in the arts, humanities, and the social sciences, on what data do you base your contentions that a sufficient number of quality persons will choose to pursue careers in these fields?

Answer: Graduate students who wish to pursue their studies in the arts and humanities qualify for other Federal student aid and support from postsecondary institutions, foundations and private sources. In addition, a variety of Federal programs outside of the Department support graduate study, for example, programs funded by the National Science Foundation and the National Endowment for the Humanities.

Needy graduate students are currently eligible for assistance under the Department's Guaranteed Student Loan program and would be eligible for assistance under the proposed expansion of the Income Contingent Loan program. Also under the Department's proposals, unsubsidized Supplemental Loans to Students would be limited only by the cost of education. Given the variety of aid available, we see no reason why quality persons would not choose to pursue careers in these fields.

COOPERATIVE EDUCATION

Question: What is the relative cost per student under Cooperative Education programs as compared to other forms of student financial assistance that are supported in your budget request?

Answer: Cooperative Education programs are not student aid programs but involve grants to institutions to establish and administer cooperative education programs. Thus, it would be difficult, and inappropriate, to compare the cost (Federal or institutional) per student under cooperative education programs with Federal student aid.

Cooperative Education students are eligible for, and receive, Federal student assistance, including Work-Study. On a general basis, the National Commission for Cooperative Education has estimated that approximately 200,000 students are currently enrolled in cooperative education programs at a total cost which is unknown. We estimate that approximately 5.5 million students currently receive federally generated student assistance totalling more than $15 billion, with an annual Government cost of over $8 billion.

Question: What is the current demand from postsecondary institutions for Federal awards under the Cooperative Education program? How many of these institutions do you estimate have not yet established such programs?

Answer: During fiscal year 1986, approximately 349 institutions requested funding totalling almost $64 million under the Cooperative Education programs administered by the Department. We are unable to provide information on the number of institutions which have yet to establish cooperative education programs nationwide since many institutions establish such programs without the support of Federal funds.

INNOVATIVE PROJECTS FOR COMMUNITY SERVICES

Question: Have funds for these projects been distributed, now that the Department's 1987 rescission request has been disapproved?

Answer: The Department has published a Notice of Proposed Rulemaking and an Application Notice for this program with a closing date of June 16, 1987. We plan to make grant awards by the end of September.

FEDERAL AID FOR COLLEGE FACILITY CONSTRUCTION

Question: Your 1988 budget includes no funding for new higher education academic facility construction or renovation. You propose to shut down new activity in College Housing Loans and Higher Education Facilities Loans, and you decline to fund the start up of the new College Construction Loan Insurance Association. Your justification documents assert that colleges and universities do not need Federal assistance because they can obtain commercial financing, because enrollments are dropping and there is less need for construction, and because colleges have profited from the economic recovery and have been able to increase their endowments.

Although the Department has not collected any data on the magnitude of the problem, private estimates of the need for infrastructure investment range from $30 to $50 billion. However, we understand that only about 15 percent of our colleges and universities have been able to obtain construction financing from commercial loans or bond issues. And, not many colleges have the luxury of a sizable endowment.

Based on these facts, how do you conclude that colleges and universities do not need Federal assistance?

Answer: We have no data available to confirm the assertion that only 15 percent of the nation's colleges and universities have been able to obtain commercial loans or bond issues. The statement is highly questionable in light of the fact that 42 percent of the nation's colleges and universities are public. While most States do have some kind of control over the access of public colleges and universities to bond financing, it seems unlikely that these institutions have been "unable" to obtain it if approved by the State. State approval would still be required for public institutions that wish to build new facilities with either grants or loans.

In the case of private institutions, it is likely that private institutions that are unable to obtain financing are already experiencing financial difficulties and should not be borrowing. To give such institutions help in constructing new facilities--either through grants or loans--would not be in the best interest of the Federal Government.

HIGHER EDUCATION FACILITIES LOANS AND INSURANCE

Question: What data do you have that is directly related to the adequacy or condition of academic facilities that might be assisted under the Higher Education Facilities Loans and Insurance program?

Answer: A number of studies have been done to determine the need for assistance in constructing and renovating facilities. Estimates of the need for general construction, renovation, rehabilitation and deferred maintenance range from $40 billion to $80 billion.

The National Science Foundation has estimated the 1985-86 cost for science, engineering, and medical facilities at $1.7 billion. In addition, the General Accounting Office has estimated the need for scientific equipment and instrumentation at between $1 billion and $4 billion annually.

The Department, however, does not believe that the Federal Government should assume responsibility for financing the capital outlay needs to generally maintain the physical plant of institutions of higher education--especially while attempting to restrain spending. Responsibility for this type of fundamental institutional support lies with colleges and universities themselves, State and local governments, and private sector users and beneficiaries.

Question: When was the last time these facilities were surveyed, either by the Department or in private studies?

Answer: The last studies we are aware of were conducted during 1986.

Question: Why do you want to terminate this program prior to obtaining information necessary to determine the need for it?

Answer: No new loans have been made under this program since 1981, with only four loans made during the period 1976 through 1981. So we are not proposing "termination" of this program in 1988 but

continuation of an existing longstanding policy approved by the Congress many years ago.

LOAN REQUESTS

Question: How many loan requests did the Department receive in the past year?

Answer: We received no loan requests under this program last year.

LOAN ASSETS SALE

Question: What is the current schedule for selling the loan portfolio of the Higher Education Facilities Loans and Insurance program?

Answer: We are offering institutions of higher education the opportunity to prepay their loans at a discount during fiscal year 1987. If the target for asset sales in fiscal year 1987 is not met through these discounted prepayments, we plan to package and sell loans to meet the $579.2 million target.

The proposed combined targets for asset sales for the College Housing and Higher Education Facilities loans are as follows:

Fiscal Year	Target (in millions)
1987	$579.2
1988	674.7
1989	64.7
1990	39.0

LOAN ASSET SALES REVENUE RESTRICTION

Question: How would this schedule be changed if the sales restrictions under section 783 of the Higher Education Act were removed, as you have requested?

Answer: If the legal limit of $314 million in proceeds for 1988 were lifted, we would expect to receive $674.7 million in proceeds in 1988. The restriction found in section 783 of the Higher Education Act limiting loan asset sales revenues may, unintentionally, cause the Government to realize a lower yield from loan asset sales than might otherwise be generated if there were no artificial limit on the Government's loan sales structuring options--how many and the characteristics of loans it sells--and the number of potential purchasers. Also, because the Government does not know the maximum price which will be offered for a block of loans, it is not difficult to imagine a scenario in which the price offered exceeded the anticipated price and, if accepted, caused the Government's revenues to exceed the legal limit. The Government should avoid a scenerio in which legal constraints prevent officials from acting in the Government's best financial interests.

Question: What Federal revenues have been lost as a result of discounted sales of loan portfolios, after netting out avoided operating costs?

Answer: The Federal Government has not lost any revenue as a result of the discounted sale of loans. The discounted sales of loans outstanding are designed to yield an amount equal to the present value of the loan minus operating costs.

COLLEGE HOUSING LOANS

Question: What data does the Department have concerning higher education facilities construction and renovation funding needs?

Answer: A number of studies have been done to determine the need for assistance in constructing and renovating facilities. Estimates of the need for general construction, renovation, rehabilitation and deferred maintenance range from $40 billion to $80 billion.

The National Science Foundation has estimated the 1985-86 cost for science, engineering, and medical facilities at $1.7 billion. In addition, the General Accounting Office has estimated the need for scientific equipment and instrumentation at between $1 billion and $4 billion annually.

Question: If you do not presently have data, what plans have you made to obtain it?

Answer: We do not plan to conduct any surveys to assess the need for construction or renovation needs of colleges and universities. The surveys the Department has done to date yield highly subjective results making them highly suspect. The National Science Foundation is in the second phase of a nationwide survey of R&D facilities which may yield data useful for Federal planning in this area.

Question: If the Department sold off loan portfolios up to the limits assigned by Congress for 1988, how much new loan activity could be generated in 1988?

Answer: The income generated from the sale of the loan portfolio is not intended to be used to make new loans but to reduce the amount the Department owes the Treasury. If the funds are used for a different purpose, Congress will have to appropriate funds to pay off Treasury borrowing in future years.

Part F of Title VII authorizes appropriations to cover the cost of new loans. Thus, the sale of the portfolio need not limit the amount of loans made under this program.

Question: What data do you have that is directly related to the adequacy or condition of housing facilities that might be assisted by College Housing Loans?

Answer: We have no up-to-date objectively reported data on the overall condition of housing facilities nationwide.

Question: When was the last time these facilities were surveyed, either by the Department or in private studies?

Answer: The last studies we are aware of were conducted in the early 1980's.

Question: Why do you want to terminate this program prior to obtaining information necessary to determine the need for it?

Answer: We believe that sufficient data are available to assess the need for this program as explained in our budget submission.

LOAN REQUESTS

Question: How many loan requests did the Department receive in the past year, and how many of these were you able to fund?

Answer: Last year, the Department received 127 loan applications with requests totaling $287,152,524. We were able to provide 36 loans totaling $57,420,000.

LOAN ASSETS SALE

Question: What is the current schedule for selling the loan portfolio for College Housing Loans?

Answer: We are offering institutions of higher education the opportunity to prepay their loans at a discount during fiscal year 1987. If the target for asset sales in fiscal year 1987 is not met through these discounted prepayments, we plan to package and sell loans to meet the $579.2 million target.

The proposed combined targets for asset sales for the College Housing and Higher Education Facilities loans are as follows:

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CONNIE LEE

Question: The House has included a $20 million appropriation for partial capitalization of the College Construction Loan Insurance Association on the 1987 supplemental bill. We understand that the administration opposed the appropriation on the House side, partially because of the view that the private sector can capitalize the corporation without government assistance. Yet, in accordance with the authorizing legislation, the administration appointed four members of the corporation's board of directors, who subsequently voted to proceed with the attempt to obtain the Federal appropriation.

It appears that the administration is trying to have it both ways on this issue. Should not the administration follow the recommendations of the members of the board of directors that it appointed and support a $20 million appropriation for Connie Lee?

Answer: Although four of the corporation's directors were appointed by the Administration, the corporation operates as a private entity and the views of these individuals do not necessarily reflect the views of the Administration. We do not agree that Federal funds are needed to capitalize the College Construction Loan Insurance Association (CCLIA). Based upon our review of the ability of the Student Loan Marketing Association to raise capital, it seems likely that with their active involvement in establishing CCLIA, sufficient funds will be generated from private sources to provide the capital.

Question Submitted by Senator Quentin N. Burdick

TRIO PROGRAMS

Question: Elimination of four of the six TRIO authorities is proposed. Under that proposal, 338,000 students would be eliminated from TRIO projects. In North Dakota, 13 TRIO projects service over 3,000 students, and all of them would be affected in some way by your proposed cuts. For example, over 1,600 students are enrolled in two Talent Search projects that would be eliminated. The assumption that seems to underlie your proposal is that the money that would be cut would somehow be replaced from other sources. The Indian community colleges and State colleges that currently conduct projects funded through TRIO are not in a position to replace this Federal money. How do you propose these colleges maintain the TRIO initiatives?

Answer: The services provided under the Talent Search and Educational Opportunity Centers programs duplicate services provided by State, local and institutional efforts, particularly by high school counselors and college admissions and counseling personnel. The Staff Training program supports training and travel for TRIO programs personnel, not direct services for students. In this time of a high Federal budget deficit, we have to establish priorities among our programs. The elimination of the lower priority Talent Search, Educational Opportunity Centers and Staff Training programs will enable us to focus funding on those direct services programs which are most effective and of higher priority.

Question Submitted by Senator Lowell P. Weicker, Jr.

FUND FOR THE IMPROVEMENT OF POSTSECONDARY EDUCATION

Question: In the fiscal year 1988 budget documents you applaud the success of the Fund for the Improvement of Postsecondary Education and at the same time request a 40 percent decrease from the fiscal year 1987 appropriation. What is your rationale for cutting a program when it has in your opinion run efficiently?

Answer: The large Federal deficit forced a very careful and considered review of all budget items. We believe that the revised request level will be sufficient to enable the Department to address the most significant quality issues in postsecondary education, particularly when combined with the activities of our Office of Educational Research and Improvement. A major consideration to bear in mind is that FIPSE projects tend to be continued and to have a large ripple effect. They are selected because they show promise for dissemination. A recent study indicated some 88 percent of the projects that had been completed still existed two years later and many had been replicated by other institutions.

EDUCATION RESEARCH AND STATISTICS

Questions Submitted by the Subcommittee

NATIONAL ACADEMY OF SCIENCES REPORT

Question: Mr. Finn, the National Academy of Sciences report on the Center for Educational Statistics, which was commissioned by the Department and released last September, highlights serious problems that have persisted at the Center for many years:

-- poor quality of data and lack of timeliness in its release;
-- problems of staff competence and management;
-- failure to establish priorities in data collection;
-- lack of technical quality in publications; and
-- lack of uniformity in State-reported data.

Please update us on the steps you are taking to address these problems, which compromise the integrity and professional standing of the Center for Educational Statistics.

Answer: Many of the problems identified in the Academy's report were already being addressed before the report was released. The report, however, gave additional strength to our resolve to bring about changes which we, ourselves, knew had to take place. Our goal was and is to bring the Center to the level of integrity, competence, and accountability that is associated with other major Federal statistical agencies.

In the area of data quality and timeliness, the Center, during the past year, developed a set of standards covering all aspects of its activities, from planning to publication of reports. The staff is now being trained in implementing the standards under the direction of our Chief Statistician. Also, last November, we released a list of publications for the year. By the end of April, we had released over 95 percent of the publications planned for release by that time. In sheer numbers of publications, that was equal to what the Center produced for all of last year. And, to provide users with data as quickly as possible, the Center has introduced E.D. Tabs, tabulations of survey data which must be ready for public distribution not more than two months after final data processing.

To enhance the capabilities and productivity of the Center's staff, the Center was given authority to hire approximately thirty new staff members with expertise in statistics, psychometrics, econometrics, and statistical computing. Among the new hires is our Chief Statistician, who is the focal point for technical quality efforts of the Center.

Staff are being encouraged to take training in new developments in statistical sampling, measurement, survey design, and data processing, and to attend and present papers at professional meetings. The Center's Research Fellows Program (sponsored by the American Statistical Association under a grant from the National Science Foundation) begins this year with Dr. Ingram Olkin of Stanford University, Dr. Edward Haertel, also of Stanford, and Dr. Larry Hedges of the University of Chicago. These Fellows will be available for training and consulting with Center staff.

Their major work, however, will be to address how technology can be used to improve data quality and timeliness in the future.

The need to establish priorities and to maintain collegial relationships with data users and providers were cited in the Academy report. The Center has intensified its efforts to gather insights and recommendations from data users and providers. Collaboration with the Council of Chief State School Officers, the National Governors Association, the Council of Great City Schools, private school organizations, the State Higher Education Executive Officers, numerous advisory panels, and congressional staff is helping to solidify the Center's program and set priorities.

The technical quality of Center publications, the visible result of its diverse survey activities, is being closely monitored by the Chief Statistician and the Director of the Center. All publications, now and in the future, must conform to the Center standards.

Publications, however, are only as good as the data on which they are based. Uniformity in State-reported data has been a problem in the past and continues to be a problem. The Center has already reached agreement with the Chief State School Officers on common definitions for reporting data on schools and students. Work is continuing on common definitions for staff and fiscal data, and we expect to reach agreement on these terms in 1988. These agreements will form the basis for individual State data plans to be negotiated this summer for the school and student component and during 1988 for the staff and fiscal components, an activity of extreme importance to the Department and the Congress since billions of Federal dollars are allocated to States based on State-reported fiscal data. In addition, we have proposed legislation for a "National Cooperative Education Statistics System" that would have the Federal Government and the States working cooperatively to collect and report education data. Similar systems are already in place in the Bureau of Labor Statistics, the National Center for Health Statistics, the Energy Information Administration, and the Department of Agriculture. The bill would allow States to use Chapter 2 funds to improve their data collection and reporting systems to conform with cooperatively established uniform requirements.

Question: Why should we approve your request for a funding increase until we can be certain that the problems at the Center have been resolved and the funds can be put to good use?

Answer: The Center has made major strides toward all the goals described in the National Academy of Sciences report. There is more to be done, but the accomplishments so far have been significant. However, these improvements in the function of the Center are for naught if it cannot apply them to the basic purpose of the Center -- to gather and report data to the public. The funds proposed in the President's budget will permit the Center's data program to cover more topics more completely and with better reliability and timeliness.

More specifically, in fiscal year 1988, the Center will be implementing the first data collection for the schools and staff surveys, the first step in obtaining essential data on teachers and

on teacher supply and demand. The surveys were designed after extensive input from educators, researchers, data providers, and Federal staff as part of the Center's redesign of its elementary/ secondary data system.

The first data collection for the National Education Longitudinal Study of the Eighth Grade Class of 1988 will take place along with planning for the first follow-up of those students as they progress to the 10th grade. This study will provide the most complete information on dropouts available anywhere and on the effects of high school.

The Center will be funding the continuation of a thirty month grant to conduct the 1988 National Assessment of Educational Progress (NAEP). In addition, the Center will follow up the recommendations of the Study Group on National Assessment and plan for a new cycle of assessments to begin in 1990. NAEP provides the only nationally representative data on what students know and can do, subject by subject.

Data collection will begin on a new survey of postsecondary instructional staff, a survey that will provide national information never collected before. These data will fill a gap in data already collected through the newly designed Integrated Postsecondary Education Data System that describes postsecondary institutions, enrollments, degrees, and finances. That system will be fully implemented in 1988.

Together, these studies will provide information that Congress has mandated and that educational policy makers have requested repeatedly. Without the increased funds requested in our budget, the data cannot be provided.

NATIONAL ASSESSMENT OF EDUCATIONAL PROGRESS

Question: Mr. Finn, we know that you and Secretary Bennett have enthusiastically endorsed the report of the Alexander-James panel, which recommends a dramatic expansion in the National Assessment of Educational Progress -- the biennial survey of student educational achievement. The report recommends increasing the sample size nine-fold in order to obtain State-specific results and expanding the number of academic subjects tested in each survey.

Some people have raised questions about whether you will have the technical capacity to implement the recommended changes.

-- Do you expect the survey contractor to be able to manage such a large data base and to report the results in a timely way, especially when the contract for the survey will expire in the middle of the expansion and a diferent contractor may be chosen?

Answer: Managing a large data base should not pose a significant problem. The Center has experience with contracts and grants for large data bases. Other Federal agencies, such as the Bureau of Census and the Bureau of Labor Statistics, do large scale data collection as a matter of course. Also large contracting and testing organizations, some of which administer millions of tests annually, could manage to collect the test data and report results on a timely basis. A greater challenge is administration of the

tests on a standardized, consistent basis, an issue the Department is currently addressing.

With regard to possible interruption of work as one grant comes to an end (in June, 1988) and another begins, the planning that is being done in anticipation of phasing in the new NAEP will ensure that the data collection process is not interrupted. The grantee for the 1990 assessment, the earliest test year that the Alexander-James Study Group recommendations could be implemented, will be selected well in advance of data collection and, in fact, well before a 1989 pretest. The new grantee must be given sufficient funds by the Federal Government to manage the expanded data base that would allow for quality control and timely reporting of results.

Question: When do you expect to transmit proposed legislation to the Hill that would authorize the recommended changes to the survey?

We expect to submit legislation making appropriate revisions to the authorization for the National Assessment with our 1989 budget request.

SETTING RESEARCH PRIORITIES

Question: Can you tell us what type of process the Department uses to set priorities for research funding and what opportunities interested outside parties and advisory groups have to influence this process?

Answer: Specific objectives and certain mandated activities for the Office of Education Research and Improvement (OERI) have been established by Congress in section 405(b) of the General Education Provision Act. Congress also requires the Secretary to publish proposed research priorities in the Federal Register every two years. A notice of proposed research priorities for fiscal year 1989 should be announced in the fall of 1987. Under this notice, comments will be invited from all interested parties.

The Office of Research in OERI is presently conducting a series of regional forums for the purpose of soliciting advice and recommendations for research priorities from the field. Two such meetings were held in April, and two are scheduled for June. Teachers, principals, school superintendents, State and local representatives, businessmen, and parents are invited to address these meetings and to identify critical education-related problems that might be addressed by research studies. Reports from the regional sponsors of these meetings, combined with ongoing discussions with the wide array of educational and professional associations interested in education research, will play a major role in determining and substantiating proposed research priorities, particularly those that may differ or extend Congressionally mandated priorities for research. In preparing its recommendations, the Office of Research will have consulted with over one hundred practitioners and policymakers through regional forums and with representatives of approximately 50 education associations.

It is the policy of OERI to invite external advice on the formulation of all major plans and activities. OERI is also

advised by the National Advisory Council on Educational Research and Improvement (NACERI). In addition, the Center for Education Statistics has its own Advisory Council on Educational Statistics (ACES) which provides advice and counsel. The Center was also the object of an intense and rigorous investigation by the National Academy of Sciences. The Academy's recommendations are presently being implemented.

Finally, the Department also solicits external advice on its work from various groups. For example, in May 1986, the Secretary formed a study group composed of prominent Americans to take a fresh look at how we currently assess students' knowledge of various content areas through the National Assessment of Educational Progress. The study group report, along with a review by the National Academy of Education, was released by the Secretary in March 1987. The Secretary has accepted most of the recommendations, and the Department is moving to carry them out.

Question: What would you describe as the Department's top two or three priorities in its 1988 research funding request?

Answer: The Department's three top priorities in its 1988 research and statistics budget request are as follows:

(1) Repairing the nation's education data base by means of an ambitious program of improvements in statistical data collection and reporting;

(2) Monitoring, describing, and appraising education reform and its effects; and

(3) Examining teaching and learning in some of the academic subjects which comprise the core curriculum--math, science, literature, and elementary education.

Question: Specifically, what efforts are underway or planned in the areas of adult literacy and dropout prevention?

Answer: In collaboration with the Department of Labor, we are planning a study to produce a guidebook of diagnostic instruments to evaluate literacy problems. This guidebook will include an appraisal of the strengths and weaknesses of reviewed tests. The guidebook will enhance the quality of adult literacy programs by improving the match between what is taught in those programs and what the adults need to know.

In April of this year the Secretary announced the award of five research grants to improve literacy. One of these awards is to the University of Wisconsin, Madison, to study the basic reading skills of adults who are poor readers. Three other grants focused on elementary and secondary students and another one on inmate populations.

Both the Center on Effective Secondary Schools (University of Wisconsin) and the Center for Effective Elementary and Middle Schools (Johns Hopkins University) are engaged in research to identify "at risk" students. Such research has implications for dropout prevention. A sourcebook for working with students at risk of dropping out will be available for distribution from the

Center on Effective Elementary and Middle Schools in the fall of 1987. In addition, ongoing intramural research on low-income, low-performance schools is closely related to the issue of dropout prevention.

Programs for the Improvement of Practice has worked with a network of 32 urban public school superintendents to develop a publication on dropout prevention. This publication, to be released in 1987, will share the urban superintendents' insights and experiences on what strategies, programs, and practices hold the most promise for keeping students in school. Following release of the publication, the superintendents' network will form study groups to work more intensively on dropout prevention strategies and recommendations for research and practice.

The nine regional educational laboratories have agreed to collaborate in an effort directed to students who are at-risk of failing either to complete the 12th grade or to achieve in their education what they need to become successful adults. The work aims at dropout prevention/intervention and is intended to be a long-term, programmatic effort to develop, implement, and maintain a national resource information base describing programs and resources that hold potential for making a difference for failure-prone students. In addition to this collaborative effort, many of the laboratories are individually devoting resources to address more directly the education of at-risk students in their region.

OERI REORGANIZATION

Question: What do you now consider to be the major accomplishments of the October 1985 reorganization of Education Research and Statistics activities? Is the reorganization now complete, or is it still being implemented? What cost savings have you achieved through the reorganization, and how have these savings been used to support ongoing activities?

Answer: Secretary Bennett's reorganization of the Office of Educational Research and Improvement (OERI) has been completed. Reauthorization of the research and statistics functions has proceeded successfully and senior level positions in OERI have been filled. As a result of the October 1985 reorganization, OERI has experienced major accomplishments in two important areas: program direction and internal management.

OERI now has a clearer sense of direction and purpose. It is making progress toward the accomplishment of clearly articulated goals which guide its planning and program operations. As a result, the work of OERI is more clearly focused and better managed. OERI's goals are as follows:

- to improve the nation's statistical information on education by increasing the quantity and quality of available data;

- to supply increasingly reliable information about educational outcomes and quality;

- o to improve the dissemination and use of education information by practitioners, policy makers, and the general public;

- o to enhance the intellectual capital of education by engaging in well chosen and high quality investigations of important issues and serious problems that may be illuminated by research and other forms of disciplined inquiry; and

- o to strengthen literacy, education, and knowledge through prudent management of library programs and the development of sound principles of library quality.

OERI also has made major advances in improving the management of its internal operations. OERI's progress toward the goal of strengthening its operations so that quality control, reliability, promptness, clarity, rigor, and professionalism characterize all OERI work is not as visible as its programmatic activities but are just as critical to its success. OERI is paying unremitting attention to matters such as peer review, personnel management, handling of publications, budget and program planning, and internal operating policies and procedures.

Our pursuit of excellence in the management of our resources and the direction of our program activities has resulted this year in:

- o clearer lines of authority and responsibility;

- o increased integration of program, budget, and personnel planning;

- o development of an OERI-wide policy for the review of publications;

- o development and implementation of an OERI-wide peer review policy; and

- o implementation of an OERI-wide policy for management and use of the excepted appointment authority.

Although we are not able to enumerate actual dollar savings, we can cite examples of improved efficiency of operation that ultimately may be translated into dollars. For instance, we have consolidated our general administrative functions in the Office of the Assistant Secretary, and we have centralized our administrative support functions required to make grants and contracts with those of all other program offices within the Office of Management. In addition, the October 1985 reorganization makes it easier for OERI staff to work together across program lines. Collaborative efforts are used more often now to respond to initiatives that require the wide range of skills and expert knowledge of staff in the various program offices. This type of activity promotes fuller utilization of staff, often results in a higher quality product, and enhances communication across organizational boundaries about topics that are of interest to OERI.

ACCOMPLISHMENTS OF OERI

Question: Other than implementing the reorganization, what are the major accomplishments of Education Research and Statistics programs during the past year? Have you identified any organizational problems that might need additional legislative amendments?

Answer: Of OERI's many worthwhile accomplishments during the past year, several are worth highlighting. First, we have successfully implemented an OERI-wide policy requiring peer review and expert advice on all major decisions about program planning, development, data collection, publications, and grant and contract evaluation.

The Center for Education Statistics has, while maintaining its core data collections on elementary/secondary and postsecondary education, made major strides towards repairing the education statistics data base. It has initiated the redesign of the elementary/secondary statistics system to include sorely needed data on schools and staffing and to provide linkages with outcome data in 1990. It is field testing a major new longitudinal study to address questions of who drops out of school and the effects of high school. And, it is considering recommendations for changes in assessment as a result of a report of a National Study Group on Assessment.

At the postsecondary level, the Center is conducting the first comprehensive national study of student financial aid as well as conducting studies to increase our knowledge of the characteristics of faculty and of the relationship of college grades and course taking patterns to employment outcomes for recent college graduates.

The Center has also made major strides to improving the quality and timeliness of Center data. It has hired a chief statistician to oversee the quality of its work and adopted and begun implementing standards for the conduct of its work. It has set timelines for release of data, published schedules for these releases, and instituted early estimates systems for high priority data releases.

While there is still much to be accomplished, the Center has taken significant steps this year towards the goal of becoming a major statistical agency.

Other major OERI accomplishments include the institution of an OERI Fellows program, funding of ten Field-Initiated Studies projects, completion of the first stages of the ERIC redesign study, selection of ten new research and development centers, selection and funding of nine regional educational laboratories, and continuation of the Chapter 1 study. OERI was also deeply involved in the production of several publications which have had a significant impact on education and have brought us much praise, namely, What Works: Research about Teaching and Learning, Japanese Education Today, First Lessons (the Secretary's report on elementary school education), and several booklets based on Becoming a

Nation of Readers. We also sponsored conferences in 1986 on school discipline, magnet schools, drug abuse education, reasoning skills, adult literacy, and low-performance, low-income schools.

We have not identified a need for legislative amendments related to the organization of OERI.

INFORMATION RELEVANT TO REAUTHORIZATION OF ELEMENTARY AND SECONDARY PROGRAMS

Question: What are the recent products of the Education Research and Statistics activities that might provide background information to the Congress for the reauthorization of elementary and secondary education programs? What portion of your budget has been spent for these activities?

Answer: The Center for Education Statistics collects information across all levels of education in the U.S. and publishes annual and periodic reports of its findings. Of particular importance is the 1986 Condition of Education report, which contains sections on private school enrollment and tuition trends, preschool enrollment trends and implications, trends in elementary and secondary public school enrollment, and school dropouts in the United States. The 1987 Condition of Education report will be available this summer and will focus on indicators related to both elementary/secondary and postsecondary education. The report will include data on enrollment trends, completions, revenues and expenditures, dropouts, adult literacy, and education attainment of adults.

In addition, a number of other smaller reports and bulletins are available now covering topics such as adult literacy, computers in the classroom, use of computers in home study, and trends in adult education, among others. Reports from the Center's Longitudinal Studies program and the National Assessment of Educational Progress (NAEP) are also available. NAEP has reported on knowledge and skills of American students in reading, math, science, and other areas over nearly two decades.

The Center is presently planning a project to provide 1990 Census data by school district, which will make data available for State allocations of Chapter 1 funds. Also, current activities associated with the Center's redesign of its elementary/secondary data collection system will improve the comparability of data on which per pupil expenditure calculations are based. These data are used for allocating billions of dollars of Departmental funds for elementary/secondary education.

The Center estimates that approximately 25 percent of its budget is used for the activities described above.

Additionally, in December 1983, Congress mandated that the Education Department, through the then National Institute of Education, conduct a national assessment of Chapter 1 of the Education Consolidation and Improvement Act. That assessment, now being conducted by the Office of Educational Research and Improvement, has produced two interim reports and a set of preliminary findings. The final report of the study staff will be available in late spring. These reports will provide the Congress with information about the population of students whom Chapter 1 is intended

to serve--educationally deprived students residing in areas with high concentrations of children from low-income families. No 1987 funds have been spent on this study, but approximately $1.5 million in the 1986 budget of the Office of Research went for the study.

ACCOMPLISHMENTS OF LABS AND CENTERS

Question: What are the accomplishments to date of the labs and centers following their recent receipt of new 5-year awards under the Education Research and Statistics account? Have each of the labs and centers been funded at the level established by these awards, or have some of these awards been adjusted since the initial agreements?

Answer: Each of the regional educational laboratories and the education research and development centers has been funded at the level negotiated in its 5-year contract or grant.

The regional laboratories and education research and development centers have been carrying out the work described in their proposals. Each of the regional labs has made significant progress in a number of areas including needs assessment, planning, strengthening relationships with educational leaders and service agencies, delivering training and other services to clients, and disseminating research and practice-based information. For example: (1) the Southeast Educational Improvement Laboratory has developed a series of training modules for principals based on identified competencies of "high performing" principals. The Florida Academy for School Leaders estimated that use of one module (problem analysis) saved $1,000 for a single session and delivered better services than consultants used previously; (2) in its work with States and State legislatures, the Mid-Continent Regional Educational Laboratory assisted a number of States with reform activities, such as revising school classification and accreditation standards in Missouri, completing studies of Education Service Agencies in Nebraska, and economic development activities in North Dakota; (3) the Southwest Educational Development Laboratory has worked through the five State departments of education in its region to establish five demonstration schools--one per State. Each school features programs directed to an at-risk population located in isolated communities, and is assisted by the lab in building partnerships with parents, communities, businesses, neighboring LEAs and universities, SEAs, and other groups that can provide school improvement assistance; and (4) the Appalachia Educational Laboratory has developed and disseminated Link, a research and development based newsletter with inserts geared to different audiences, including teacher-educators, school administrators, school boards, and others.

Each of the education research and development centers has established and met with its own national advisory panel and concentrated on the development of collaborative relationships with universities, "think tanks", and education practitioners. Most have convened seminars and conferences in order to draw upon the wide range of researchers located at other universities and centers. For example: (1) the Center on Postsecondary Governance and Finance at the University of Maryland sponsored a symposium on "College Financing Alternatives," which focused on capital needs in higher education and the impact of tax reform; (2) on June 24-26, 1987, the Center on Teacher Education at Michigan State University

is sponsoring its first "Annual Retreat" of national leaders in teacher education; and (3) the Center for Policy Research in Education at Rutgers University (with Rand Corporation) is sponsoring a conference on "Indicators of Teacher Quality", which will focus on ways to identify indicators of teacher quality and effectiveness. Over the course of the next two years, all centers will be reporting on the progress of long-term studies, most of which will be completed during calendar years 1988-1990.

ACCOMPLISHMENTS OF FIELD-INITIATED RESEARCH PROGRAM

Question: What has been accomplished with the field-initiated research program, funded under Education Research and Statistics? What might be expected if the funding for these activities were doubled in FY 1988, as you requested? How have these projects helped to improve the Nation's education system?

Answer: In fiscal year 1986, we funded ten field-initiated research projects. These projects should enhance our understanding of a number of long-standing educational problems and improve instructional practice in several areas. For example, one project tests the effectiveness of a school-community program in reducing juvenile delinquency and gang violence in urban areas. Another study focuses on the characteristics of potential high school dropouts. Other projects address pressing issues such as minority achievement in mathematics and science, ability grouping in middle schools, tracking, and effective reading programs. The results of these projects will be available to disseminate to practitioners in 1988.

Although the projects are not yet completed, we anticipate that they will provide new ideas for organizing schooling for young adolescents in a way that could reduce the number of students-at-risk in our schools, and could increase the quality of education provided this age group; encouraging minority children to pursue work in mathematics and science; improving coordination of learning across subjects in the high school curriculum; and enhancing reading comprehension of young children.

In fiscal year 1986, 341 applicants requested a total of approximately $34 million. We were able to fund only 3 percent of the applicants; we were not able to fund many additional meritorious projects. We believe that increased funding would allow us to support more high quality research in fresh and promising areas.

EFFECTIVENESS OF SCHOOL REFORM

Question: Why are new studies needed to track the "impact and effectiveness" of school reforms under the Education Research and Statistics account? Why not use funds available to the Secretary for the education block grant program authorized under Chapter 2 of the Education Consolidation and Improvement Act?

Answer: We are proposing the School Reform Assessment project to develop and test indicators or measures that will help policy-makers better understand the nature, implementation, and impact of State and local education reform initiatives.

While this activity could be supported by the discretionary funds authorized under Chapter 2, this effort is part of a long-term research and development effort that complements ongoing activities in the Office of Research. It is directly related to research being conducted by a number of the existing education research and development centers, particularly the Center for State and Local Policy Development and Leadership at Rutgers University.

Typically, grants originating from the discretionary funds are designed to stimulate the development and demonstration of new practices and programs. After funding the mandated programs under the Secretary's Discretionary Fund, only $1.5 million remains at the true discretion of the Secretary.

CHANGES IN ERIC

Question: What changes do you plan to make to the Education Resources Information Center (ERIC) system under the Education Research and Statistics account?

Answer: We are proposing to maintain and probably enlarge ERIC's current subject coverage, and we plan to recompete all sixteen ERIC clearinghouses this year. Further, we are proposing to add four new system components: ACCESS ERIC, adjunt clearinghouses, a Statistical Referral Center, and ERIC Partners.

In brief, ACCESS ERIC will provide systemwide coordination, training, materials development, and outreach and awareness activities designed to make ERIC services and products accessible and useful to a greatly expanded audience. Adjunct clearinghouses will be established to enhance ERIC coverage and dissemination of documents and materials on topics not adequately treated under the current configuration, such as art and music, private education, and education policy. A Statistical Referral Center will provide liaison between ERIC and the Center for Education Statistics, for the dissemination of statistical information. ERIC Partners will be organizations and institutions that will actively and widely distribute ERIC materials or services.

Question: What are the major problems with the existing system? Has there been any independent evaluation of the quality of the ERIC system? If not, what is the basis for making changes in ERIC?

Answer: Recently, the ERIC Redesign Study Panel identified several major problems with the existing ERIC system, including: (1) limited access for certain audiences; (2) insufficient outreach and dissemination efforts; and (3) need for closer ties with other complementary OERI and Department dissemination programs.

During its 20 year history, numerous studies have been conducted of ERIC; most of these have focused on user needs and ERIC services and products and not directly on the quality of the content of the database. For instance, the Cost and Usage Study of the Educational Resources Information System, conducted in 1981 by King Research, Inc., provided data about the universe of organizations who use ERIC resources and provided insight into how effectively ERIC resources serve information providers and their clients.

Other studies, such as the Network's Multimethodological Study of Providers and Users of ERIC-Based Resources and Services (1986), focused on the means through which ERIC is delivered. In particular, the Network study recommended that "OERI should acknowledge the critical role of information service providers as essential elements of the ERIC system and develop ways to enhance, network, and advertise them as such." Two redesign proposals in particular -- ACCESS ERIC and ERIC Partners -- are responsive to this recommendation.

Several internal evaluations have also been conducted. The latest, the ERIC Redesign Study, has been ongoing for the last 18 months. In addition to the five OERI experts who sat on the ERIC Redesign Study panel, other experts outside of government included a member of the Missouri governor's staff, a reporter from the Dallas Times Herald, and representatives from the information science and education communities.

Question: How many contracts with existing clearinghouses will be terminated? How many of these will be replaced?

Answer: All 16 ERIC clearinghouses will be competed this year, with January 1988 awards. We plan a well publicized national competition open to all, including present contractors.

Question: Why are the review and redesign activities taking place simultaneously?

Answer: The review of ERIC which culminated with the publication of the report, "ERIC in Its Third Decade", was undertaken to determine ways of improving the system. Thus, there was quite naturally overlap in the review and redesign activities.

RESEARCH FELLOWS

Question: How many research fellows are being sponsored in 1987? With what universities or organizations are they affiliated?

Answer: The deadline for applications for OERI Fellowship awards for fiscal year 1987 is June 3, 1987. The review and selection of candidates will be completed by the end of June, with awards for between three and five fellows scheduled to be made in July.

Our fiscal year 1986 competition brought seven fellows to OERI this year. They are affiliated with the following universities: The Catholic University; the University of Michigan; Arizona State University; Harvard University; Princeton University; Georgetown University; and the University of South Carolina.

FIELD-INITIATED RESEARCH

Question: What topics are currently being studied in field-initiated research? Does the Department identify high priority topics for this research, either when soliciting proposals or when deciding on research grant awards?

Answer: Of the 341 proposals submitted in the fiscal year 1986 competition, we were able to fund only ten projects. They address the following topics: the academic content of the high school curriculum; influences on enrollment in institutions of higher education; the relationship of school organization to student achievement; minority achievement in mathematics and science; gang formation; the effects of tracking, i.e., grouping students by academic program and achievement level; adult literacy programs; equity and excellence in American educational history; effective reading instruction; and school dropouts.

The Department does not identify priority topics when soliciting field-initiated proposals because the purpose of the program is to support the best research proposals generated from the field. Funding decisions are based on the national significance and technical soundness of the proposals based on the recommendations of external peer reviewers.

AUTOMATION AND ERIC

Question: Do any libraries have automated access to the Education Resources Information Center (ERIC) system? If not, shouldn't this be a top priority in the redesign of ERIC?

Answer: The ERIC system is highly automated and available to users through several national, commercially-available, online information services. Most U.S. college, university and public libraries have computer access to the ERIC database. The Directory of ERIC Information Services Providers (1986) identifies some 891 organizations, most of whom provide computer access to ERIC; most of these organizations are libraries.

Question: Should creation of EDsearch be done in tandem with automating ERIC?

Answer: EDsearch is a computerized telecommunications system currently being planned. It will provide education administrators, practitioners, policymakers, parents, and journalists with instant access to the latest OERI research and statistics. The system capabilities will include online searching of statistical databases, electronic messaging and electronic mail, computer conferencing, and electronic transfer of statistical findings and research results. As we design EDsearch, we will be investigating a variety of ways of providing this new database service to ERIC users.

EDUCATION LIBRARY

Question: How many requests for assistance or materials does the OERI Library receive each year?

Answer: The following statistics show library usage for fiscal years 1983 through 1986.

	1983	1984	1985	1986*
Reference and Searches	7,392	8,131	8,944	4,768
Interlibrary Loan	3,551	3,527	3,406	1,961
Circulation	1,753	1,255	2,002	1,551
Telephone Calls	4,418	10,448	13,332	2,156

*Library closed for relocation from May 1986 through the end of the fiscal year.

Question: What acquisition budget is assumed for the library in the 1988 request? How does this compare to the 1987 level?

Answer: The amount for library acquisitions for 1988 is $105,000. The amount for acquisitions for 1987 is $84,000.

STATE-SPECIFIC ASSESSMENT DATA

Question: What portion of the $26 million price tag for the revised National Assessment of Educational Progress (NAEP) recommended by the Alexander-James Study Group is attributed to expanding the sample for State-specific data versus increasing the number of academic subjects tested?

Answer: Approximately $11.6 million of the $26 million represents expanding the sample to provide State-representative data. That includes assessing student performance at three grade levels in three different subject areas. Roughly another $3.5 million represents expanded academic subject costs. The full implementation cost level includes the current collection of nationally representative data and also transcript studies, a parental study, a literacy study of out-of-school 17-year-olds, costs related to greater participation in developing test goals and analysis plans, and research to improve test construction and administration.

Question: We understand that 14 States already pay for some State-specific supplementary NAEP samples. Has the Department pursued the possibility of State financing for the increased NAEP sample sizes recommended by the Alexander-James Study Group?

Answer: The Department is looking at a number of options for financing the Alexander-James Study Group recommendations. We are currently evaluating which approach is most suitable considering costs, managerial feasibility, and appropriate Federal, State, and contractor roles.

FIELD READER PROCESS

Question: Please describe the changes you made to the field reader process in 1987? Does your 1988 budget request for this activity assume continued use of these modified procedures?

Answer: We are adhering to the Department's policy of non-payment of field readers. We pay only the transportation cost and

per diem of panel members in cases of extremely complex or second tier reviews. Otherwise, we rely upon the U.S. Postal Service and express mail to send proposals to field readers. Occasionally we organize conference calls so that field readers can discuss issues. OERI's 1988 budget request for field readers assumes similar procedures for peer review activities.

CENTER ON SCHOOL LEADERSHIP

Question: Your budget request assumes the establishment of a new research center on school leadership. While acknowledging that school leadership has been shown to be an important variable in educational outcomes, is this an appropriate topic for study? Is leadership ability something that can be taught?

Answer: The people who work in schools every day--especially teachers, principals, superintendents, and school board members--have extraordinary insights into how schools and leadership within them work. But, perhaps because they lack time and energy, they often find it extremely difficult to articulate this knowledge, to tell what they know.

So, perhaps we may already know all we need to know about school leadership, but the best of what we know is simply not accessible; it is locked inside the heads of thousands of people who work in schools every day. The purpose of this center is to unlock this knowledge and put it into a form which is both scientific and useful.

Can this knowledge, if unlocked, be taught? Indeed, it can. Moreover, if we could make our "tacit" knowledge of school leadership explicit, systematic and general, we could achieve remarkable gains in student achievement. But we cannot make this tacit knowledge scientific without the help of scholars who have been expressly trained to articulate and make our knowledge scientific. However, if researchers are to translate what practitioners know into a language that is not only scientific but also practical and useful, some third agency is needed to forge a rapprochement between them. OERI hopes to be that agency.

Moreover, many proposed reforms in education include substantial changes in the leadership structure of schools, changes in the leadership role of teachers, changes in the supervisory role of principals, and changes in the discretion of teachers and principals in budgetary and curriculum areas.

Research from a variety of disciplines demonstrates that numerous leadership qualities can be taught. It is the challenge of this proposed research initiative to specify those that are particularly effective in school settings and to identify ways they can become common practice in American schools.

LIBRARIES

Questions Submitted by the Subcommittee

NEED FOR LIBRARY FUNDING

Question: Mr. Finn, you justify the termination of Federal assistance to libraries by saying that most Americans now have access to library facilities. This assertion begs some pretty important questions, such as limited access, quality and modernization requirements. Can you assure me that our Nation's libraries, particularly in some of the poorer parts of the country, no longer need Federal library assistance?

Answer: Although the concerns which you mention are important, State and local governments have the ultimate responsibility and provide almost all of the financing for providing library services to the general population. Library Services and Construction Act (LSCA) formula grant funds are not allocated to States based on indices of poverty, but States may use them to help address some of these important questions. State aid programs for public library services now amount to over $318 million annually, and most of these programs are designed to ensure some degree of equity among library users.

Question: Can you provide us with any evidence that State and local governments would assume the financial responsibility for making available quality library services, especially to underserved constituencies such as handicapped or institutionalized persons, without the aid under title I of the Library Services and Construction Act?

Answer: LSCA provides only a small percentage of the funds used for the purposes mentioned; most library funding comes from non-Federal sources. Nearly all States now have programs of State aid to local public libraries. Furthermore, the level of assistance has increased by 26 percent from 1985 to 1986, reaching $318 million annually. We feel confident this support will continue.

Question: In particular, what non-Federal sources of support are there for library services to Indian and Native Hawaiian populations?

Answer: Some Indian tribes receive support from private foundations, such as the Bush Foundation in Minnesota, which provides funds for public library development and improvement. Urban Indian populations in States such as California and New York already have access to local public library services. The Native Hawaiian population is served by the State Library of Hawaii, which is a single library system supplying services statewide.

Question: There are rapidly growing public demands for new forms of library materials--microcomputer software, videotapes, access to on-line computer databases, etc. If the availability of such materials is left to local governments and commercial markets, then present gaps between affluent and other Americans in information access and technological sophistication could grow much wider. Should public libraries not try to provide such materials to all interested individuals, regardless of income or residence, and does

the Federal Government have a responsibility to help make that possible?

Answer: Public libraries do provide such materials, but it is up to each community to decide on its level of support for public library services and on the degree to which the new technologies you mention should be made available. There will naturally be differences among communities based on choice as well as affluence. Again, the Library Services and Construction Act provides a negligible proportion of aid to libraries, and significant programs of State aid to public libraries are now in place which can help to reduce the gaps between affluent and other communities.

Question: Is the benefit of supporting the provision of these new services analogous to the benefit of expanding access to minimal library services when the Library Services and Construction Act was first adopted in 1956?

Answer: They are not analogous. Your reference to "new services" relates to the availability of new technology, not access to basic services. We agree that library services should be accessible to all, but few would suggest that the same range of services and materials is necessary in both a major urban resource library and a rural area which may use a bookmobile or books-by-mail program to provide services. Local demand, not the Federal Government, should determine the range of library services and materials.

Question: Under provisions of the Library Services and Construction Act Amendments of 1984, P.L. 98-380, 2 percent of title I funds are to be used to provide library services to American Indians and Native Hawaiians. How have these funds been used?

Answer: In fiscal year 1986, funds made available to Indian tribes were used as follows: 26 percent for salaries of library personnel, 26 percent for library materials, 19 percent for construction or renovation, 9 percent for transportation of library users, 6 percent for dissemination of information about library services, 6 percent for needs assessment, and 8 percent for such things as training, special programs for the elderly and preschoolers, and programs dealing with Indian heritage.

Funds made available to serve Native Hawaiians were used as follows: 30 percent for library personnel salaries, 20 percent for administrative expenses of the grantee, 17 percent for such special projects as literacy training and homework centers, 11 percent for transportation, 8 percent for needs assessment, and the remainder for such things as training, dissemination, and library materials.

Question: Before implementation of this legislation, what resources were devoted to library services to these groups?

Answer: The Department does not collect comprehensive data in this area, but it appears that Indian tribes relied on their tribal income, grants from private foundations, and cooperative programs with local and State public libraries to provide library services to their communities. Native Hawaiians were and are served by the single library system covering the State of Hawaii.

Question: How would library services to these groups be provided if Library Services and Construction Act funds were not available?

Answer: Library services for Indian tribes could be supported with other Federal program funds, through actively seeking private grants and donations, and through cooperative programs with State and local public libraries. Native Hawaiians would continue to be served by the Hawaii State Library.

Question: What is the level of total Federal aid to public libraries, including direct aid under non-Department of Education programs, such as General Revenue Sharing, and such indirect forms of aid as postal subsidies?

Answer: The Department is unable to arrive at a total of all Federal aid to public libraries. However, the major Federal program outside the Department of Education providing direct aid was the General Revenue Sharing program, which was last funded in fiscal year 1986.

Question: Has this total level of aid been rising or falling in recent years?

Answer: Again, the Department does not collect comprehensive data in this area. However, the thing we should be looking at is whether the main purposes for Federal involvement in the public library area have been met. We feel that they have and point to the fact that access to public library services has been extended to 96 percent of the Nation's population, compared to only 56 percent when the Library Services and Construction Act was enacted over 30 years ago.

Question: How have such Federal policies as requiring accessibility to the handicapped affected public libraries in recent years, and might Library Services and Construction Act funds be seen partially as a compensation for the costs generated by other Federal policies?

Answer: Since 1965 the Library Services and Construction Act funds have, to a small extent, supplemented State and local expenditures for local public libraries in meeting, for example, accessibility requirements for the handicapped. We feel confident that State and local support will continue to meet these needs.

Question: The last major study of the Library Services and Construction Act title I program was published in 1981, but focused on program activities in fiscal year 1978. You might react to a suggestion that a new evaluation be conducted by referring to your proposal that the program be terminated. But since your termination proposals have not been accepted in the past, might it not be reasonable to initiate a new evaluation of this program in order to obtain more current information on its activities and effects, especially in view of the "technological revolution" that has substantially changed library operations and priorities since 1978?

Answer: We consider options for program evaluations each year as part of the planning process. However, because this program

plays such a minor role in the overall financing of the Nation's libraries, it has not received as high a priority as those programs and activities where the Federal role is more central. The manufacturers of the new technologies, and consumer response, play a much larger role in library priorities than limited Federal funding.

PUBLIC LIBRARY CONSTRUCTION

Question: For what specific types of construction needs have the fiscal year 1987 Public Library Construction funds been used--how much for new construction, renovation to accommodate new technologies, provision of accessibility to the handicapped, asbestos removal, energy conservation, or other purposes?

Answer: We have only recently begun to make grants from 1987 funds. However, the following project activities were supported this year from carryover funds from previous fiscal years:

Type of project	Number funded
Remodeling and alterations	44
Expansion of existing libraries	33
Construction of new building	31
Handicapped accessibility	26
Energy conservation	19
Accommodating new technologies	5
Acquiring historic buildings	2

Question: In your justifications, you state that $13.5 million in unobligated appropriations for the Public Library Construction program were carried over from fiscal year 1986. Why were these funds not obligated in 1986? Was there no need for these funds? Were there no valid applications for use of these funds?

Answer: The biggest factor behind this unobligated balance appears to be the lead time that is needed by State and local governments to identify sources of matching funds before they can apply for a grant. Congress has recognized this need by providing appropriation language making the funds available until expended. This allows time for such things as passing bond issues, preparing and getting approvals on architectural plans, etc. Some States are ready to use the new funds as soon as they become available and have valid applications on hand; other States wait until the funds are made available before beginning the process.

Question: In fiscal year 1986, how many requests for construction funding did States receive versus the number they were able to approve, based on available funds?

Answer: We do not have that data. Since this program is administered by the State library agencies, this type of information is not requested by the Department.

INTERLIBRARY COOPERATION

Question: The demands for and available means of electronic information sharing seem to be growing at an accelerating rate. Can local public libraries meet these growing demands without continued Federal assistance?

Answer: States are increasingly taking a significant role in leadership and funding in these areas. The importance of electronic information sharing has been demonstrated to the States through the seed money provided by the Interlibrary Cooperation program. The States have responded positively with 24 States in 1985/86 supporting programs of State aid for library networks with nearly $90 million. Libraries have incentives for pursuing cooperative ventures without Federal assistance, since such efforts provide a cost-effective means of expanding services.

Question: To what extent is the Federal Government providing technical assistance to public libraries regarding possible uses for new forms of information technology?

Answer: Our Library Programs staff has provided extensive technical assistance to the State library agencies on many of the new forms of information technology. Information on these technologies is also disseminated by the manufacturers, library professional associations and training organizations.

Question: Is it appropriate for the Federal Government to conduct research and disseminate information on such technological developments?

Answer: The primary mission of the Office of Educational Research and Improvement is to conduct research and disseminate reliable information about all facets of American education. Such efforts would certainly include new information on library technology, whether or not specific library programs are funded.

Question: What are the implications, especially for libraries serving rural or non-affluent communities, of leaving such research and dissemination to commercial or other non-Federal organizations?

Answer: The Department and other Federal agencies, such as NEH and the Library of Congress, would continue to conduct research and provide data in the absence of funding for the library programs. However, the Federal Government cannot and should not be expected to be the principal entity in such research and dissemination.

Question: Would it not be most cost-effective for the Nation at large for the Federal Government to take the lead in evaluating the possible uses of the newest forms of information technology--such as laser disks--for library purposes?

Answer: The Federal Government has always been a minor player in the evaluation of the uses of the newest forms of information technology. We are convinced that the open marketplace, involving associations, commercial enterprises, schools and colleges, and State and local governments, is the best forum for the evaluation of the possible uses of these technologies.

Question: How is the Department of Education, or any other Federal agency, helping libraries consider such new ways of providing services in a more cost-effective manner?

Answer: One of the ways the Department has helped libraries look at more cost-effective library services has been through the

Interlibrary Cooperation program. Since 1967 nearly $130 million has been awarded to State library agencies in support of library networking projects, which are very cost effective. For example, many public libraries shifted the costs of individually cataloging books and materials to subscriptions to linked bibliographic data services. Some libraries reduced personnel costs and the costs associated with the acquisition of books and materials through networking, which has grown at both the State and local levels. Also, libraries are always seeking means of increasing their cost-effectiveness on their own and through their professional and training organizations.

Question: What incentives do individual States have to conduct such research?

Answer: All levels of government should seek ways to best use tax revenues. Through research more cost-effective ways of delivering library and information services are to be discovered.

Question: Wouldn't it make sense to continue funding Interlibrary Cooperation as a more cost-effective way of ensuring that libraries have adequate collections rather than having each library spend its limited dollars on the same materials?

Answer: Federal involvement is not needed since libraries have incentives for cooperating even without Federal funding. State and local governments have the information needed to make wise funding decisions, after more than 20 years of Federal incentive aid.

DEMAND FOR NEW TECHNOLOGIES

Question: We've all watched the tremendous explosion in audio-visual technologies in the past several years and the innovative ways in which libraries have adapted these technologies to expand resources for their users. But, as we all know, these new technologies don't come cheap. I'm concerned that if we depend on States and localities to finance new technology acquisitions for libraries that we will increase the inequity in access to materials. Is it fair that residents of an affluent community can benefit from video tapes, computerized data services or microfilm when people from a low-income community cannot?

Answer: Each community must decide on the level of support for these library services, and there will naturally be differences among communities. There is strong evidence that State and local aid in support of these new technologies is increasing. States should be able to reduce any inequities between affluent and other communities.

Question: Doesn't the Federal Government have a legitimate role to play in ensuring equality of access to these important new materials?

Answer: Again, the Federal funds supporting libraries represent a negligible proportion of the total funding, and significant programs of State aid to public libraries are now in place which can help to reduce the gaps between affluent and other communities.

LIBRARY LITERACY PROGRAMS

Question: Why do you request an increase in funding for the Adult Education Act but termination of funding for the complementary Library Literacy Programs? What forms of Adult Basic Education are more cost-effective than Library Literacy Programs?

Answer: We feel the $22 million increase in the Adult Education Act Grants to States program more than compenstates for the termination of the $5 million Library Literacy Programs. Making awards to the State education agencies under the Adult Education Act provides more flexibility than the Library Literacy Programs allows for State and local education agencies to choose the approach they feel is most cost-effective and best meets their needs.

Question: In your justifications, you state that "this program is not necessary to increase the number of literacy projects in public libraries." What sorts of adult literacy activities have public libraries been undertaking with non-Federal resources?

Answer: We do not have complete data on the use of non-Federal funds for these purposes, but State reports on the LSCA programs indicate a substantial amount of activity in this area.

Among the State library activities, the California State Library has developed a large statewide library literacy effort, providing leadership and several million dollars annually to local public libraries to conduct literacy projects. The Colorado State Library has developed a large, active statewide initiative that has conducted a public awareness campaign, created a resource clearinghouse, and promoted the development of local literacy coalitions. Florida, Illinois, and Michigan, among others, have helped establish State literacy coalitions that coordinate the activities of literacy associations, libraries, volunteer organizations, and education agencies within the State. Other State libraries, such as the Connecticut State Library, are working with Literacy Volunteers of America to support, initiate, or expand local tutoring programs.

Local public libraries have also been involved in a variety of literacy activities. Many local public libraries provide materials, facilities, and services to local literacy councils and to adult education programs. One of the largest and best coordinated areas of local library literacy activity is the participation of local libraries across the Nation with local affiliates of Literacy Volunteers of America. New York and Connecticut have the largest number of libraries working with LVA, but California, Massachusetts, Florida and many other States are also actively involved in LVA programs to promote the training and use of literacy volunteers.

Question: How might these activities be expanded and improved by Federal financial assistance?

Answer: Further Federal intervention does not seem to be called for; the concept of library literacy activities seems to have expanded beyond this small Federal program.

Question: Are any of the literacy programs funded by Adult Education conducted in public libraries?

Answer: Public libraries are involved in many of the Adult Education Act literacy programs, although we do not know the full extent of this collaboration. In most cases these are cooperative efforts between a local public library and the local educational agency, with the library providing a meeting space, some materials, and possibly some equipment and the local educational agency providing the training personnel.

LIBRARY CAREER TRAINING

Question: Is there substantial need for inservice training of experienced librarians, especially in the uses of new forms of information technology or the "marketing" of library services to underserved populations?

Answer: There are no recent research studies on the need for continuing education of practicing librarians. However, both the American Library Association and the Association for Library and Information Science Education report significant numbers of librarians are pursuing continuing education.

Question: Given the projected oversupply of librarians, should library training grants be focused on such inservice training?

Answer: The oversupply of librarians is one of the reasons we advocate elimination of this program. Inservice training is available without Federal assistance.

LIBRARY RESEARCH AND DEMONSTRATIONS

Question: What types of research and demonstrations are supported under title II, part B of the Higher Education Act?

Answer: Over the years, our projects have covered many facets of the library and information science field. Some recent projects include the following: (1) a study to assess the current status of libraries in literacy education; (2) a demonstration project for the improvement of public library services to Native Americans, in which short-term training models were developed and disseminated; (3) a demonstration of a statistical data-gathering model whereby State library agencies standardize data collection practices for public libraries; (4) a major study of current and emerging issues expected to influence library and information science in the next decade or two; (5) a national survey of public library services to the aging; and (6) the dissemination of an essay entitled, "Well Acquainted with Books: The Founding Framers of 1787," in conjunction with the Bicentennial of the Constitution; the essay is about the books that influenced the writers of the Constitution.

Question: How are these activities coordinated with those of the Library Services and Construction Act, especially title III, Interlibrary Cooperation?

Answer: We are attempting to have all our library programs interact to foster improvements in library services throughout the

Nation. For example, a current Library Research and Demonstrations project, "Issues in Library Research: Proposals for the Nineties," will identify future library issues and problems. LSCA coordinators will use the results of this research to plan for library services in their States. These issues will be identified by librarians and non-librarians, including State library personnel. Another current example is the development of the nationwide data-gathering model which is being tested in 17 States. This project will lead to the development of standardized automated statistical data collection in all States. These data will be used in the needs assessment and evaluation sections of the LSCA basic State plans and long-range plans.

Past research projects have supported activities specifically related to LSCA title III. These projects have resulted in several important publications in the past few years: The Federal Role in Library Networking, New Technology and the Public Library, and Academic Library Resource Sharing through Bibliographic Utility Program Participation.

Question: How are the findings and results of these research projects disseminated to other public, school, and college libraries?

Answer: Findings of our research projects are disseminated in several ways. All research project reports are entered into the ERIC database. ERIC is available throughout the country through State education agencies, schools of education, large libraries, and many school districts. Research results are also published in the form of articles or press releases in library professional journals such as School Library Media Quarterly, Library Journal, and Library Trends. Research results are also reported in newsletters, at conferences, and during on-site visits by Department personnel or grant recipients.

Question: In your justifications, you state that library-related research and development projects are funded by sources other than title II of the Higher Eduation Act. Please provide us with a list of such alternative sources of support for library-related research and development projects.

Answer: In addition to funding for such projects by other Federal agencies, such as the National Endowment for the Humanities, the following sources are among those private foundations that provide support from time to time for library-related projects, some of which may be research and demonstrations projects: Alcoa Foundation; Vincent Astor Foundation; Atlantic Richfield Foundation; Mary Reynolds Babcock Foundation; Mary Duke Biddle Foundation; William Bingham Foundation; Bush Foundation; Callaway Foundation; Arthur Vining Davis Foundations; Ford Foundation; W.K. Kellogg Foundation; Kerr Foundation; Lilly Endowment; Moody Foundation; M.J. Murdock Charitable Trust; Olin Foundation; and Pew Memorial Trust.

Question: How were the results of this research disseminated to libraries throughout the Nation?

Answer: Dissemination has occurred in various ways. For example, final reports generated by projects funded through the foundations listed above are often entered into ERIC as well as being

published in professional journals and in annual reports. Some of these reports are also published as books or pamphlets and offered for sale. Some reports have become the focus for meetings or conferences, such as the final report of the Knapp School Library Project, funded by the Knapp Foundation. This report was used as a theme for a series of national and regional meetings of elementary and secondary educators and school library media specialists.

RESEARCH LIBRARIES

Question: What is the total level of Federal support for research libraries from all agencies?

Answer: We do not have a total dollar level for such support. The Research Libraries program has had an annual appropriation of about $6 million. Two other agencies, the National Endowment for the Humanities and the National Historical Publications and Records Commission, award some funds to such libraries. Research libraries may also compete for funds in many programs open to a wide variety of organizations.

Question: How does aid provided under title II of the Higher Education Act differ from that provided under other Federal programs?

Answer: Research Libraries program funds may be awarded only to major research libraries. Other agencies generally fund projects in certain subject content areas. Applicants not qualifying for our Research Libraries funds are often referred to other agencies when the subject areas are suitable.

Question: Do many of the same individual libraries receive assistance under multiple Federal programs?

Answer: We do not have data on this issue, but we expect that most of these libraries receive funds from many different sources for various purposes.

Question: To what extent does the Research Libraries program provide support to much the same group of libraries every year, versus supporting libraries not previously aided under this program?

Answer: Program funds do tend to go to the same institutions repeatedly because they are restricted by law to major research libraries, of which there are only about 200. Over half of these have received at least one award since the program began in 1978. P.L. 99-498 has widened eligibility somewhat and permits smaller institutions to submit additional documentation to support the claim for national significance of their collections and to enter the competition for funding. Only five institutions not otherwise eligible have taken advantage of this program change and have submitted additional information for the 1987 competition now in progress.

Question: Are the grants under this program concentrated on a relatively small number of libraries, most of them associated with relatively large and prestigious universities, which are likely to have substantial endowments and other resources available to them?

Answer: Yes; as previously mentioned, the number of potential grantees is limited to around 200, many of which are located at large and prestigious institutions of higher education.

Question: In what ways is access to the research libraries, which are supported under this program, restricted?

Answer: The degree of access to collections and restrictions on loaning library materials varies from one institution to another. One major restriction results from materials not being cataloged in machine-readable form. Many libraries are entering these materials into national data bases, thus providing greatly expanded availability, i.e., access. Another limitation on access results from the necessity to restrict the use of materials because of their fragile and deteriorating condition. Libraries are preserving materials primarily through microfilming, which permits loaning of the film or making permanent copies from the negative.

Question: Can members of the general public engaged in scholarly pursuits generally obtain access to these collections, even if they do not have formal or permanent relationships to the universities or other institutions that manage the libraries?

Answer: Institutional policies regarding access will differ according to the content and format of the collections. The medieval Slavic manuscripts in microform being preserved and cataloged by Ohio State University would be less accessible to the general public, being of greater value to researchers. On the other hand, the photographic prints being preserved by the Detroit Public Library will be of popular interest and will be displayed for the general public. Scholars and researchers can always arrange access through their own libraries if general access is restricted.

Question: If such access is severely restricted, why should these libraries receive Federal assistance?

Answer: If access is to be severely restricted, a research library application for Federal funds would probably not be competitive.

Question: What is the process by which you select grantees and grant amounts under the Research Libraries program?

Answer: The process involves a two-phase peer review and subsequent staff review. Section 231 of the Higher Education Act mandates that every grant proposal must first undergo scrutiny to determine eligibility of the applicant as a major research library. Then the proposal undergoes a second review to determine quality of the projeact. Each of these reviews is conducted by a panel of peers, the findings of which are analyzed by our professional staff to ensure accuracy, adherence to program standards, and consistency in applying those standards. A slate of recommended grantees is then drawn up, taking into account peer review recommendations, geographical distribution (as required by law), and the level of appropriations available. The amount of the grant is negotiated during this process.

Question: Do you attempt to disperse funds to institutions throughout the Nation, or do you select grant recipients solely on the basis of the "quality" of their collections and grant proposals?

Answer: Geographical distribution is considered as a factor in the grant selection process, as required by law. However, this does not mean that projects of exceptional quality are put aside merely to improve the geographical distribution of grantees.

Question: In your justifications, you state that one of the purposes of the Research Libraries program is to increase access to the materials held in these libraries. In what ways have your grants increased such access, especially to the public at large?

Answer: Increasing access to these collections is accomplished by preservation of deteriorating materials, by acquiring from private sources one-of-a-kind material needed to fill in gaps in available information, and by adding information about these materials into the national databases in order that they may be readily located by researchers and scholars. As an example, the University of Illinois, in cooperation with the Library of Congress and the National Agricultural Library, is cataloging sets of U.S. Department of Agriculture and State experimental station agriculture materials dating between 1862 and 1986. Information on these materials will be entered into OCLC, one of the national databases reaching over 6,000 libraries, into AGRICOLA, the database of the U.S. Department of Agriculture, and into AGRIS, an international database on agriculture. In another example, the American Museum of Natural History has, with our program support, preserved and cataloged its extensive film, photographic, and manuscript materials that document peoples and animals now extinct, thus extending the knowledge of the existence of these materials beyond the museum itself through additions to a national database and through published guides, exhibits, articles, and presentations to professional organizations.

Questions Submitted by Senator Lowell P. Weicker, Jr.

PRESERVATION OF BRITTLE BOOKS

Question: You must be aware of the brittle books problem. I am informed that it would cost approximately $348 million to microfilm just one-third of the research library volumes at risk due to the acidic paper used since about 1850. The Federal Government has been spending less than $8 million annually on this effort through such programs as the Research Libraries program which your Department would eliminate, the NEH Preservation Program, proposed for a cut, and the National Archives--all proposed for elimination. Yet your justification says the Education Department's Research Libraries program can be eliminated because other programs will take up the slack. What programs would you advise could be used to meet this critical need in preserving brittle books?

Answer: The National Endowment for the Humanities' Office of Preservation continues to provide funds to support preservation projects at the national level. Private philanthropic organizations such as the Andrew W. Mellon Foundation have been generous in lend-

ing support. There are several other sources, including State and local government funding.

Question: Do you believe there is a Federal role in the preservation of such materials?

Answer: A limited Federal role may be appropriate, such as the NEH program. The Library of Congress has also been exploring on an experimental basis effective ways of preserving large numbers of books in a cost-effective manner. However, State and local governments have taken responsibility for preserving materials held locally, an example of which is the State of New York which has begun a preservation program with an appropriation of $11 million.

COLLEGE LIBRARY RESOURCES

Question: Under the Higher Education Amendments of 1986, the College Library Resources program was revised, making only institutions with below-average library volumes or expenditures per student eligible for assistance. Considering its new focus on institutions with special needs, why have you not requested funds for this program?

Answer: We see no need for Federal funding of college library programs. Colleges already receive several forms of Federal subsidies, and there are many non-Federal sources of funding for college libraries. Small libraries with low expenditures can also increase their services through cooperative arrangements with other libraries.

AMERICAN PRINTING HOUSE FOR THE BLIND

NATIONAL TECHNICAL INSTITUTE FOR THE DEAF

GALLAUDET UNIVERSITY

HOWARD UNIVERSITY

STATEMENTS OF:

CARSON NOLAN, PRESIDENT, AMERICAN PRINTING HOUSE FOR THE BLIND

GUS THOMPSON, ASSISTANT TO THE DIRECTOR, NATIONAL TECHNICAL INSTITUTE FOR THE DEAF, ROCHESTER INSTITUTE OF TECHNOLOGY

JERRY LEE, PRESIDENT, GALLAUDET UNIVERSITY

DR. JAMES CHEEK, PRESIDENT, HOWARD UNIVERSITY

PREPARED STATEMENTS

Senator CHILES. We have representatives here today from the independent institutions that receive funding through the Department of Education. We have Dr. Carson Nolan, President of American Printing House for the Blind, Mr. Thompson of the National Technical Institute for the Deaf at Rochester Institute of Technology, Dr. Jerry Lee, the President of Gallaudet University, and Dr. James Cheek, President of Howard University.

We are delighted to have each of you here and your statements in full will be placed in the record.

[The statements follow:]

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Statement of Carson Nolan

The American Printing House for the Blind was chartered by the Commonwealth of Kentucky in 1858 for the nonprofit manufacture of books and educational aids for use in the education of blind children in special schools for the blind. In 1879, the Congress passed an Act to Promote the Education of the Blind which, as amended, now enables the Printing House to provide educational materials for all blind students below college level throughout the United States, its territories, and possessions. The total request for 1988 for this program is $5.51 million, $10,000 more than the amount appropriated for fiscal year 1987. Legislation has been proposed to terminate the permanent appropriation of $10,000 provided in lieu of interest income from the small trust fund established by the 1879 statute. To compensate for the elimination of the permanent appropriation, an offsetting increase of $10,000 has been added to the fiscal year 1988 request. Accounting and budget tasks at the Federal level alone almost equal the amount of this appropriation, which is less than one-fifth of one percent of the annual appropriation for the Printing House. The total request will continue to provide approximately 42 percent of the Printing House's total budget.

Educational Materials

Of the funds requested for fiscal year 1988, $5.0 million will be used to supply an estimated 47,000 blind students with special educational materials. This number represents an increase of 1,000 students over fiscal year 1987. Of the 47,000 blind students, 40,000 are enrolled in grades twelve and below and 7,000 are enrolled in adult programs. The per capita allotment for fiscal year 1988 is $106.81.

Advisory Committees

The request includes $140,000 for expenses for Advisory Committees, the same amount used in fiscal year 1987. This budget category covers the expenses of the two Advisory Committees which determine what books will be published and what new materials will be developed. But more importantly, it covers the cost of informing teachers and administrators about what materials are available, how they may be obtained, and how they are to be used, as well as the cost of the annual census of blind students conducted in January.

Educational and Technical Research

Approximately $350,000 will be allocated for educational and technical research, the same amount as allocated in 1987. These funds will serve as a base to enable the Printing House to develop needed educational materials in a variety of subject areas such as reading, mathematics, science, microcomputer applications, and for special groups such as the multihandicapped blind and preschool blind.

The American Printing House continues to serve a growing and complex group of blind students who require many different kinds of educational materials.

As of January 1986, 33,919 legally blind students were regis-

tered through State departments of education, 4,662 were enrolled in residential schools, 1,692 were enrolled in programs for the multi-handicapped, and 5,657 were enrolled in rehabilitation programs. Among these, 6,317 read braille, 15,205 were visual readers, 9,296 were auditory readers, 3,331 were prereaders, and 11,781 were non-readers.

New educational materials and teaching aids are developed and produced each year to keep educational programs for these students current. In addition, reprints and reruns of older materials are made as required.

The American Printing House uses its own funds to maintain a finished goods inventory of $3.1 million to ensure a timely delivery of special materials to educational programs.

In the last twelve months, progress has been made in a number of areas. Some of these are as follows:

1. The Printing House has undertaken two projects which should help to improve significantly its administration of the Act in 1988. These programs should improve the ability of States to derive the maximum benefit from resources available for blind students, including those of APHB, and to obtain these materials as expeditiously as possible. The projects are being supported by private contributions at a cost of $382,000.

   A. Computerization of the annual census - Each January, APHB conducts a national census of legally blind students eligible for materials provided under the Act. As part of this census, each of the 160 APHB trustees provides a list of students, together with supporting data. Starting in 1988, these lists may be supplied on tape or floppy disk so that the data can be analyzed by computer. Files on tape or disk will make it much easier to update the data base annually.

   B. Establishment of APHB-Central Automated Resource List - APHB will work through Special Net, a special education computer network, to establish a national computerized communication system which will allow eligible persons by telephone to:

      directly order materials from APHB; monitor the status of their Federal accounts at APHB; have direct access to textbooks produced by volunteer organizations throughout the nation; and borrow educational materials.

2. A major effort is under way in the area of microcomputer applications to provide the support materials necessary to train blind students in this area, and a new product line is being developed to support it. New products recently made available include:

   A. Large print and braille editions of microcomputer related manuals such as the Apple II DOS User's Manual, Apple IIe Owner's Manual, Echo II Speech Synthesizer, and Random House Book of Computer Literacy.

   B. A growing array of talking educational software for microcomputer applications.

C. Hardware to make microcomputers talk.

3. Tests of braille skills and reading proficiency.

4. Additional materials to teach increased use of remaining functional vision.

In response to interest expressed by the Committee, the Printing House continued efforts to hire blind persons. An additional blind computer programmer and a blind trainee for marketing management were recently hired. Currently, APHB employs 386 persons, of whom 22 are blind and 38 have other disabilities.

As always, we continue to make steady progress in meeting the educational needs of blind children.

Mr. Chairman, I will be glad to answer any questions concerning this budget request.

Statement of Gus Thompson

I am pleased to present the President's 1988 budget request for the National Technical Institute for the Deaf.

The National Technical Institute for the Deaf at the Rochester Institute of Technology (NTID at RIT) was created by Congress to provide postsecondary technical education for the Nation's young deaf people to prepare them for successful employment. NTID trains professional staff to serve the Nation's deaf population and conducts research into educational achievement, communications, personal/social instruction, and economic and employment aspects of deafness. The 1988 request for the National Technical Institute for the Deaf is $33.0 million, which includes $1.0 million to create an endowment matching grant program.

The specifics of the fiscal year 1988 request follow.

Operations

The fiscal year 1988 request of $32.0 million for operations, which includes funds for services to students, research, training, and information dissemination, maintains funding at the 1987 appropriation level. Of the requested amount $31.1 million is for the base program and $943,000 for the rubella epidemic of 1964-1965, which represents a small shift of $8,000 from the regular to the rubella programs. While the Federal contribution would remain the same, the proportion of funds raised by NTID continues to increase. The Federal subsidy would constitute 83 percent of total funding in 1987 and 82 percent in 1988. The rubella epidemic of 1964-65 doubled the incidence of babies born deaf throughout the United States during that period. The epidemic caused NTID's admissions to increase from a norm of 375 to 611 in fiscal year 1984, to 484 in fiscal year 1985 and 426 in fiscal year 1986. Admissions for fiscal year 1987 dropped back to the pre-rubella norm. This past year NTID received 730 applications, a decrease of 181 from 1985 and 268 from 1984, and had a fall 1986 entering class of 379. At the same time, enrollment has grown from a normal pre-rubella level of nearly 1,000, to 1,260 in fiscal year 1984 to 1,319 in fiscal year 1985 to 1,296 in fiscal

year 1986, and then dropping slightly to 1,288 in fiscal year 1987. For the fall of 1987, NTID will admit an estimated 328 new students.

The 1988 request for operations would support academic programs in the areas of career development, research, training, and information dissemination.

Career Development

The education provided at the National Technical Institute for the Deaf transcends that which is typically provided by a traditional technological institution by dealing with personal/social and communication setbacks that the deaf may experience. Through a coordinated system of direct instruction and support services such as tutoring, notetaking, instructional technology development, and career counseling, the Institute strives to offer educational programs geared to the specific needs of each student. This approach has proven highly successful since historically more than 90 percent of our graduates who seek employment have been placed in jobs within eighteen months of their graduation.

Research

NTID will continue to support applied research in the technical and general education of the deaf population. Research is conducted in the areas of speech, audiology, manual communication, visual information processing, use of the English language, personal/social accommodation, cognitive strategies, career development and decision-making, educational support services, instructional technology, the characteristics of NTID's target population, and the accommodation of graduates in the workplace. NTID will also focus a major effort on reporting of NTID proven products, procedures, and systems which have broad-based impact on other organizations with deaf education responsibilites.

The primary focus of NTID's research efforts has not deviated from the direction set forth in the 1965 Department of Health, Education, and Welfare report on the education of the deaf. NTID has already received a number of benefits from its research efforts and as a result, students are leaving NTID better prepared for their future. In addition, research findings which can provide assistance to professionals and educators working with the deaf will continue to be disseminated through workshops and publications.

Training

Continued emphasis will be placed on training programs for professionals, graduates, interns, counselors, job placement specialists, and interpreters. In 1982, NTID began an Associate Degree program for interpreters which has been expanded from 15 to 60 students per year. Training efforts at the Institute have increased significantly recently and will continue to increase as the existing programs are revised and refined, and as other educational institutions look to NTID for guidance in developing programs to comply with Public Law 94-142 and Section 504 of the Rehabilitation Act of 1973. Preservice training for teachers of the deaf will continue in conjunction with the University of Rochester, and in-service training will be provided through faculty exchange, internships, and fellowships.

Information Dissemination

NTID will continue sharing educational techniques and processes, research findings, and training techniques with other educational programs for the deaf.

Among other products for dissemination, the award winning quarterly publication Focus is currently distributed to more than 17,000 professionals in deaf education, business, and government, providing them with a greater awareness and appreciation of the capabilities of our Nation's deaf citizens. Also our Product Catalogue, featuring NTID-produced research and teaching materials, has received an outstanding response.

Endowment Grant

One million dollars is requested for the endowment matching fund recently authorized by the Education of the Deaf Act of 1986. NTID will receive these funds as it raises additional endowment funds from non-Federal sources on a dollar for dollar matching basis. In addition, the Institute can spend up to fifty percent of the income derived from the investment of the funds for operating purposes. The use of the endowment approach is an important step toward decreasing NTID's dependence on Federal funding in future years.

Summary

In summary, the 1988 request is designed to continue the National Technical Institute for the Deaf's commitment to the achievement of equal opportunities for the handicapped persons. In the Institute's brief history, it has been shown that young deaf adults can overcome the consequences of their handicap, become contributing members of society, and vastly improve the quality of their lives.

Mr. Chairman, I will be pleased to answer any questions you may have.

Statement of Jerry Lee

I am very pleased to be here today to present the fiscal year 1988 budget for Gallaudet University. It is a great honor to represent this newly-designated University as its president, and I would like to share with you today not only our budget request, but also the objectives we have established to ensure that Gallaudet achieves the status of a distinguished special university. In so doing, I want to express my deep appreciation for your efforts in passing the Education of the Deaf Act of 1986, which reflects not only your commitment to quality education for our Nation's deaf citizens, but also your confidence in Gallaudet's success in serving this special constituency.

The President's Budget demonstrates a priority on programs which provide educational opportunities to disabled persons. The 1988 budget request for Gallaudet University maintains funding for college programs, the Model Secondary School for the Deaf, and the Kendall Demonstration Elementary School at the 1987 appropriation level. In addition, the request includes a proposed increase of $1 million for

a new matching endowment grant program. This would bring Gallaudet's total budget to $63 million, a $1 million increase over the fiscal year 1987 appropriated level. The new Federal matching endowment fund program will provide a significant boost to ongoing activities by providing an added incentive for private corporations, foundations, and individuals to increase their contributions.

Efforts will be made in 1988 to improve the efficiency of operations as well as to allow for program expansions without the need for increased Federal funding. These efforts will include reallocating resources from within, capitalizing on management improvements and efficiencies, maintaining income from non-Federal sources, and continuing to develop private funding sources. While the total number of students estimated for 1988 is expected to decrease slightly over 1987, the number of these students whose deafness is attributed to the rubella epidemic of 1964-1965 is expected to increase. This shift is reflected in the internal reallocation of resources between regular college programs and the rubella related college programs.

I firmly believe that the distinguished status to which Gallaudet aspires can be earned only by deeds, not conveyed merely by proclamation. Gallaudet has made some important strides toward this goal, and more steps are to be taken in the upcoming fiscal year. Already, Gallaudet has demonstrated that it is an institution of national scope, drawing a select group of college-bound deaf students from all fifty States as well as many other countries, serving the outreach needs of a growing proportion of organizations and individuals who interact with and on behalf of deaf people, and in conducting the vital research which leads to improving the quality of life for all hearing-impaired citizens.

The statistics speak for themselves. With the highest enrollment in the University's history, our students' SAT scores are ranking in the top third among deaf college applicants. And, deaf students are leaving the University with equally high grade point averages. When they do graduate, over 90 percent continue to gain placement in areas that promise successful professional careers and over 60 percent enroll in graduate training programs to pursue advanced degrees. Three-fourths of those students earn their masters or doctorate degrees.

Still, I see more steps that have to be taken. A distinguished special university must offer a vital and challenging curriculum; one that moves into expanding fields of study at the undergraduate and graduate levels with a design to serve the ever-changing needs of the nation. It is the development and teaching of this curriculum that requires the specific and very special skills of a nationally-recognized faculty. In dedicating this institution to academic excellence, it is my primary objective to use the requested resources, both financial and human, to the task we have set out before us.

University Program

A distinguished university presents a vibrant face to its constituencies. Programmatic efficiencies in other areas will allow us to expand four programs without requiring additional Federal funds.

To improve the training of deaf students so that they may com-

pete successfully as professionals in the field of business, Gallaudet University is establishing the School of Management. Along with offering an array of undergraduate majors, the School will offer the first entrepreneurial studies program in the area. This will serve a growing base of deaf professionals who have begun careers in the business world, but who need continuing development to achieve maximum potential. Initial funding for this program has been accomplished from a consolidation of existing programs and through reallocating funds. A drive for outside non-Federal funding to provide the technology necessary in the education of management students, initiated during 1986, continues.

Further, the University is focusing on two crucial but underserved areas relating to early intervention to improve the educational prospects of deaf children, and the needs of the rapidly expanding population of hearing-impaired senior citizens. Existing masters programs to train specialists in gerontology and in early childhood education are being expanded through reallocating funds.

Finally, during the 1986 fiscal year the University began a masters program in the area of mental health counseling for the deaf population, a vital need. This program was initiated through the reallocation of funds and positions from within the institution to expand the body of knowledge in this area. The year 1988 will see the first graduates of this program.

Model Secondary School for the Deaf and Kendall Demonstration Elementary School

A unique feature to Gallaudet University is the existence of its two pre-collegiate educational programs: the Model Secondary School for the Deaf (MSSD) and the Kendall Demonstration Elementary School (KDES). Both schools continue to develop exemplary instructional programs, conduct research, and develop and disseminate materials for both mainstream and residential school settings.

Upon completion of the GAO study on the research and demonstration functions of these programs, both schools envision that their products and services will receive an even wider distribution.

As a central resource of learning, service, and research, Gallaudet continues to willingly assume its responsibility to deliver its programs beyond the borders of the Washington metropolitan area. By 1988, Gallaudet's regional center concept will be expanded into new regions of the country as well as into international points around the world. Along with increasing numbers of articulation agreements with other programs serving the deaf and the dissemination activities of MSSD and KDES, these efforts share the unequalled experience and expertise developed at Gallaudet with thousands of students who otherwise would not enjoy this benefit.

Education of the Deaf Act of 1986

As a landmark piece of legislation, the Education of the Deaf Act has the potential to benefit deaf people nationwide. Along with bestowing university status upon Gallaudet and establishing the matching endowment grant program, a national commission has been launched to study fully the quality and quantity of programs serving hearing-impaired individuals. Gallaudet applauds this effort and

looks forward to the recommendations that will come forth during fiscal year 1988.

Mr. Chairman, I thank the Committee for this opportunity to come before you today, and I welcome your questions.

Statement of Dr. James Cheek

It is my privilege to appear before you on behalf of the Department of Education to present the 1988 Federal appropriation request for Howard University.

The University is seeking a total appropriation request of $170.2 million in fiscal year 1988. The amount requested is the same amount received by Howard University in fiscal year 1987. There are no budget rescissions requested for Howard University for the 1987 fiscal year. I will now explain the funding request for each of our budget components.

Academic Program

The University is seeking a total of $142.1 million to continue support of the Academic Program, the same funding level that was appropriated in 1987. This request will be augmented by a tuition increase of 11 percent for undergraduates, 12 percent for graduate students, and approximately 10 percent for students in professional programs in the 1987 fall semester. Additional efforts to increase non-Federal revenues have been made through an enhanced development fund raising program.

Endowment Program

We are requesting the sum of $2.0 million for the matching endowment program in fiscal year 1988. In past years, we have matched $2.5 million out of the combined prior years' appropriations totaling $5.9 million. We have pending approximately $4.0 million in matching endowment funds that may be forthcoming shortly for this program. Therefore, we are seeking an additional $2.0 million in fiscal year 1988.

Research

The University is seeking $5.0 million for the research component of its appropriation, which is the same amount received in fiscal year 1987. This component of our request has enabled our young faculty members to begin research activities early in their careers and had enabled Howard University to provide its academic programs with much needed research equipment and laboratories. This has been very supportive in the graduate and professional programs of the University.

Howard University Hospital

The 1988 budget request for Howard University Hospital is $22.1 million, the same amount as appropriated in fiscal year 1987. This request maintains the same level of Federal funding that has existed since 1977.

I would like to take this opportunity to express the deep appreciation of the Howard University community to the Committee for its support in past years and to express our desire for your continuing support in future years.

I will be happy to answer questions, Mr. Chairman, that you or members of the Committee may present concerning our request.

SATELLITE HEARING PROGRAM IN HAWAII

Senator CHILES. I would like to ask each of you a question or so if I could, regarding your institutions.

Senator Inouye asked me to express his appreciation to Gallaudet University for establishing a satellite program to serve the hearing impaired in Hawaii.

Dr. LEE. Thank you, Senator.

CUT BACK IN PRINTING HOUSE SERVICES

Senator CHILES. Dr. Nolan, the Department's budget documents indicate that the fiscal year 1988 request of $5.5 million will continue to cover about 42 percent of the printing house expenses.

Since the fiscal year 1988 request is a straight line of the fiscal year 1987 appropriation, and since it appears that your total expenditures are not expected to rise, what services will you cut back on in 1988 in order to absorb the reduction in real dollar terms?

Dr. NOLAN. Mr. Chairman, the majority of these funds are expended on the manufacture of educational materials, which are distributed through the States according to the number of blind students each State has with respect to the total number of persons served.

There is a per capita established. This is an amount to which each person served by this program is eligible. As a result of an increase in the number of persons served in 1988, there will be a $2.32 reduction in the per capita amount.

PER CAPITA AMOUNT AT PRINTING HOUSE

Senator CHILES. What is the per capita amount?

Dr. NOLAN. The per capita amount is $106.81.

Senator CHILES. Give me a feeling of what percentage of the total of their educational materials that would be?

Dr. NOLAN. It would be about one-seventh of the average total inventory a school would maintain for a blind student.

Senator CHILES. What would it take to make it what it was last year?

Dr. NOLAN. Well, an increase of $2, multiplied by the 47,000 persons estimated to be served in 1988 would come to about $100,000.

We estimate that it would take about $100,000 to bring it back to the 1987 level.

RUBELLA ENROLLMENT AT NTID

Senator CHILES. Thank you, sir. Mr. Thompson, according to your statement for the record you expect enrollment in the fall of 1987 to be lower than the normal enrollment, prior to the influx of the rubella students. Now that the rubella influence has subsided, why should enrollment not level off rather than drop below historical norms?

Mr. THOMPSON. First of all, enrollment is not going to drop significantly in 1988. It is expected to be approximately the same as it is in this current year, which is 1,288 students. NTID does not expect a signifcant decline in its enrollment until 1989, and by 1991 enrollment is expected to level off at approximately 1,100 students. We do not foresee our enrollment falling back to or below prerubella levels.

FOREIGN ENROLLMENT AT NTID

Senator CHILES. Tell me more about the enrollment trends, your recruitment efforts in your current attempts to admit foreign students.

Mr. THOMPSON. We feel that by the fall of 1989 or 1990, the influx of rubella students will have been served for the most part. And, therefore, we see enrollment dropping back from its level of roughly 1,288 for this year to perhaps 1,100. Because we were given the authority to build an extra academic facility in 1983 to serve the rubella influx, this means that we will have space to accommodate roughly 100 to 150 students from other countries.

We hate to see that capacity go unused. We think the foreign student idea is an excellent way of bringing us back to full capacity.

Senator CHILES. Is there any reason why foreign students should be subsidized by the Federal Government, or do you plan to have any subsidization for it?

Mr. THOMPSON. Our original plan was to do it on a full-cost basis. However, we feel that it should be done on a parity basis with Gallaudet. If we open the doors to foreign students and charge them the actual cost, we are probably talking about a charge in the neighborhood of $18,000 for tuition, room, board, and fees, whereas at Gallaudet the same charges for foreign students would amount to approximately $7,000.

This would probably preclude many foreign students from coming to NTID. Second, it violates an agreement that was mandated by the Senate in 1969 which said that there must be parity between the two colleges, in terms of the tuition, room and board, and other charges.

Senator CHILES. Well, you know, I really think the Senate was talking about parity between U.S. citizens. I do not think we were necessarily talking about parity between foreign students.

I am continually amazed, 46 to 50 percent of our graduate students are foreign students in our graduate schools, our doctoral schools. We are charging them basically for an out-of-State tuition, which is a 40- to 50-percent subsidy in that.

We have enough problems trying to carry the debt in the funding for our own people, over and over again. And it just seems like we say, be-

cause you have excess capacity you want to take on foreign students. But you want us to subsidize those foreign students. We are a hell of a lot better off to let you have a little excess capacity there.

Mr. THOMPSON. Well, I do not know, but that still leaves us with the fact that we have the room to serve additional students. We would better serve all of our students if they had the interaction with foreign students, and we would help foreign countries who do not have the critical mass of students to make it feasible for them to create programs such as NTID and Gallaudet.

I understand your concern, Senator, and our original proposal was to go full cost. But I think it is patently unfair to say that we must charge $18,000 for tuition, room, board, and fees when others are charging considerably less.

Senator CHILES. I am not looking to compound errors that I think were made. I do not see how we can hardly afford to do that.

HEARING STUDENTS AT GALLAUDET

Dr. Lee, we understand that last fall Gallaudet for the first time admitted hearing students. Update us on how this experiment is going.

Dr. LEE. We have accepted three hearing students in the university's regular bachelor's degree program. Our policy limits hearing students to 8 percent of our total undergraduate enrollment. That would be roughly about 85 hearing students at present.

It is going very well. These are hearing students who are interested in careers related to deafness. We have historically accepted hearing students in the graduate school. Hearing students in our graduate school comprise about 70 to 75 percent of the enrollment.

At the undergraduate level, we have always accepted hearing students in our interpreting program. But to accept them into a bachelor of arts program is a first. And we are very pleased with the results, so far.

MAINSTREAMING AT GALLAUDET

Senator CHILES. What do you think the total movement toward mainstreaming implies for the future viability of Gallaudet?

Dr. LEE. Gallaudet occupies a very special place along a continuum of choices. Certainly we understand mainstreaming. However, Gallaudet University provides all its students with the opportunity to fully participate in a collegiate experience. Students at Gallaudet, regardless of the severity of their hearing loss, may participate academically, socially, culturally, and athletically. They may not have that same opportunity at a college or a university designed for students who can hear.

NON-FEDERAL SUPPORT FOR HOWARD UNIVERSITY

Senator CHILES. Dr. Cheek, we are interested in learning more about your efforts to increase the non-Federal sources of funding for Howard University. Your statement describes your planned tuition increase for the fall semester as one step toward increasing revenue.

Tell us more about your enhanced development fundraising program and your task force that is looking for ways to reduce expenditures.

Dr. CHEEK. Mr. Chairman, our efforts with respect to the private sector have gone much slower than we had anticipated. We have an ongoing new directions fund campaign, which is aimed at creating an endowment—principally endowed chairs and endowed scholarships.

To date we have raised approximately $70 million toward a $100 million goal. We are currently in the process of reassessing our prospects. One of the difficulties that we encounter is that it is becoming more difficult to generate funds for general support, as compared to generating funds for specific projects or specific programs.

The problem with obtaining support from the private sector—principally the corporations and the foundations—is that certain kinds of programs are favored and others are not. Engineering and business school programs, understandably, are favored by the corporate sector, and liberal arts programs are not.

Sometime before the end of this calendar year we will have a better idea of what our prospects are in terms of meeting the original goal of $100 million. With respect to the matching endowment program, we think that we will be in very good condition, although small amounts of money are involved with respect to that.

Senator CHILES. How much of an increase in alumni and foundation contributions do you expect in your fundraising?

Dr. CHEEK. It is our objective to receive from alumni at least a 50-percent increase over the prior year's contribution. It is difficult for us to make a projection with respect to foundations and corporations because of the targeted nature of their funding.

QUESTIONS SUBMITTED BY THE SUBCOMMITTEE

Senator CHILES. Thank you, sir. I appreciate it. I will have some other questions for the record for the Department of Education.

[The following questions were not asked at the hearing but were submitted to be answered for the record:]

AMERICAN PRINTING HOUSE FOR THE BLIND

Questions Submitted by the Subcommittee

FUNDING LEVELS

Question: Since the American Printing House for the Blind has received virtually level Federal funding over the past several years, how have you managed to deal with the effects of inflation? Has your funding from other sources increased or have you had to reduce services?

Answer: In general, level funding of the Federal program, when combined with increases in the number of persons served, tends to reduce the student per capita amount, which means that States could purchase fewer materials per student. APHB received a Federal funding increase of $500,000 in 1985, when the appropriation was increased from $5,000,000 to $5,500,000. Despite a reduction in the annual appropriation of $237,000 in 1986 due to Gramm-Rudman-Hollings, total sales increased by 10 percent over 1985 for a total budget of $13,538,640. Federal funding was restored to $5,500,000 in 1987.

Question: In your testimony last year, you indicated that it cost approximately $750 to produce curricular materials for a blind student. How are such expenses met if the Federal contribution is a little over $100 and this represents nearly half of your expenditures? Do States make up for some of the costs of these materials for blind school children?

Answer: The $750 figure covers the total cost of materials necessary to educate a blind student, including tangible goods such as tape recorders, braille books, and braille writers which last for many years. Sales of educational materials in fiscal year 1986 were about $6,000,000, of which the appropriation supplied $5,020,000. Therefore, State and local education agencies spent about $1,000,000 in cash. In addition, States take several other measures to meet their needs for materials. For example, States have organized State-wide resource centers which act as educational material libraries so the same material may be used repeatedly. They also rely on volunteer workers to produce many of their textbooks, and enlist the help of local groups to support some of the costs.

CONTRACT ACTIVITIES

Question: What types of activities are undertaken at the Printing House under contract with the Library of Congress? With the Internal Revenue Service?

Answer: The Printing House primarily publishes trade books and magazines in braille and recorded form for the Library of Congress. For IRS, the Printing House publishes tax manuals and forms in braille.

EVALUATIONS

Question: The Department of Education in its budget Justifications has indicated that it plans to evaluate the Printing House, especially in light of State responsibilities to supply educational materials to blind students under provisions of the Education of the Handicapped Act. How do you assess the role of the Printing House given the responsibilities of State and local educational agencies to serve handicapped children? To what extent do States and localities currently fund acquisitions of materials for blind school children?

Answer: The Department is interested in examining the role of the American Printing House for the Blind in the education of the blind, how it may have changed since the passage of the Education of the Handicapped Act, how needs may have changed, how effectively materials and information are distributed through the existing mechanism, and how the operations of the Printing House fit into the responsibilities of the States to provide a free, appropriate public education to all handicapped children.

The role of the Printing House has not changed as the primary manufacturer of educational materials for the blind because the demand for these goods is such that only a small number of each item is needed which is of little interest to commercial producers. Currently, the Federal Government directly pays for the production and supply of most of these goods. However, States are responsible for the education and provision of educational materials and related services necessary for their blind children to learn, as provided for under the Education of the Handicapped Act. While they procure many of the materials free of charge from the Printing House, additional materials are produced by volunteers in the States or purchased by States out of their own funds from APHB or other manufacturers. States directly support about 17 percent of the budget for educational materials supplied by the Printing House.

CENSUS DATA ON BLIND STUDENTS

Question: Describe how the annual census of blind students is conducted. Do you rely on data from State agencies? How reliable is the data? Do other organizations, like the Census Bureau, also collect statistical information on the blind population?

Answer: Eligible agencies within the States supply the census data. To be eligible, a student must be legally blind, be enrolled in a formal educational program, and have an individualized educational plan or some other formal written plan. Adult students who are enrolled in programs below the college level for at least 20 hours of instruction a week are also eligible.

Descriptive data for individual students are upgraded each year. In the fall, each agency is sent a list of students registered the previous year. The agency updates this list by adding names of newly eligible students and by dropping the names of those no longer eligible. The Printing House reviews these lists to ensure that each registrant meets all criteria. A report of an eye examination by a physician must be on file for each student. Occasional audits of State records are made to check the veracity of their records.

The Census Bureau collects data on the total blind population and the Department of Education Office of Special Education Programs collects data on all students in special education programs.

LOW VISION STUDENTS

Question: 15,205 of the 45,930 students (or 1/3) identified in your January 1986 census are described as visual readers. Does this mean that a large share of your services goes to students who can read enlarged-type print?

Answer: These students are legally blind but use large print for much of their education. We supply many large print books to this group. Many of the teaching aids we produce are designed to accommodate the needs of these students. A wide variety of the materials we provide are designed to teach these students to make better use of their remaining vision. About one-third of our total services go to this group.

AUDIO TAPES

Question: How much emphasis does the Printing House place on the distribution of audio tapes?

Answer: Audio materials constitute about one-third of our annual sales. Most are targeted on the adult population and are produced under contract for other agencies like the Library of Congress. However, many teaching aids have an audio component, and we publish reference works like dictionaries and encyclopedias in this medium.

PER STUDENT EXPENDITURE

Question: The Printing House distributes about $100 worth of materials per blind student. What percentage is this of the total per student cost of educational materials?

Answer: Our best estimate of the total per student cost of educational materials is $750. However, this is the total inventory of materials a school would need for a blind student, not the amount of materials they would need to replenish each year. This is because many texts and equipment have a useful life of several years. The exact amount varies for each school district and State. However, in the aggregate for 1986, the direct Federal appropriation covered 83 percent of the sales APHB made to States for educational materials.

NATIONAL TECHNICAL INSTITUTE FOR THE DEAF

Questions Submitted by the Subcommittee

ENROLLMENT TRENDS

Question: Mr. Castle, according to your statement for the record, you expect enrollment in the fall of 1987 to be lower than the normal enrollment prior to the influx of rubella students. Now that the rubella influx has subsided, why shouldn't enrollments level off rather than drop below historical norms?

Answer: Our statement indicates that enrollment is expected to fall to just under 1,200 students in 1987. This would still be approximately 200 students more than our pre-rubella enrollment of 993 in fiscal year 1983. Our enrollment over the past three years has dropped from a high of 1,319 in fiscal year 1985 to 1,288 in 1987. We fully expect that our enrollments will continue to decline in 1989 and estimate that by 1991 we should level off at approximately 1,100 students. However, we don't foresee our enrollment falling back to or below our pre-rubella levels. Though the total number of deaf persons of college age is decreasing, we anticipate that a trend towards increased interest in career education as well as an increased awareness of NTID and its programs will allow NTID to maintain its share of the available market at the 1,100 level after 1991.

Question: Please tell us more about enrollment trends at the Technical Institute, your recruitment efforts, and your current attempts to admit foreign students.

Answer: Enrollment continues to decline, but not at as high a rate as previously anticipated. While we are not able to accurately project enrollment trends, NTID's admissions have steadily declined over the past few years, from a high of 611 in 1983 to 379 in 1986. This trend does not have an immediate effect on total enrollment. We therefore don't expect a significant decline in enrollment until 1989. After that, we anticipate that it will level off at around 1,100 by 1991.

In 1982, NTID was given a special appropriation to construct a second academic facility to accommodate the increase in enrollment anticipated due to the rubella bulge. This created the capacity to serve approximately 1,250 deaf students. This will result in excess capacity as the rubella bulge declines. The pool of American students of college age has also declined, and we do not believe we will be able to recruit enough qualified applicants to maintain enrollment at the 1,250 level. For this reason, NTID has been seeking permission to admit foreign students.

The Subcommittee on Select Education hearing on the Education of the Deaf Act included the subject of foreign students at NTID and hearing students at Gallaudet. The report language accompanying the Select Committee's recommendations required that NTID not admit foreign students and Gallaudet cease admitting hearing students until another hearing was scheduled on the subject. The Chairmanship of the Subcommittee on Select Education has since changed hands and no such hearing has been scheduled.

The Department of Education is not opposed to NTID accepting foreign students. However, the Department believes the education of these students should not be subsidized by the American taxpayer and that tuition charged foreign students attending NTID should cover the full costs of their education. While this would not include costs not directly related to education such as outreach, research, and public services, it would mean that a foreign student would pay approximately $15,000 for tuition.

FOREIGN STUDENT COSTS

Question: Is there any reason that foreign students, if admitted to the Institute, should have their tuition subsidized by the Federal Government?

Answer: The Department does not believe there is any reason why these students should have their tuition subsidized by the Federal Government. NTID does not object to having foreign students carry their share of expenses, but is concerned that they will not be able to attract this potential pool of students because Gallaudet subsidizes foreign students at a much higher rate. The Department would support NTID and Gallaudet working out an arrangement whereby the tuition, room, board and fees could be equalized for foreign students attending the institutions at a level that would ensure that these students pay approximately the full cost of their educational expenses at both schools.

Question: What percentage of the full cost of their schooling do foreign students finance through their Gallaudet tuition? What is the dollar value of the tuition they are charged?

Answer: Foreign students financed approximately 12 percent of the total expenditure per student in 1987. However, if the per student cost is calculated without including research and public service expenditures, the percentage would increase. The amount charged foreign students for tuition is 20 percent higher than for United States citizens. The estimated cost for a foreign student, to attend Gallaudet in 1988, including room, board, and fees, is as follows:

Tuition	$3,282
Room	1,400
Board	1,900
Fees	288
TOTAL	6,871

The tuition surcharge for foreign students at Gallaudet was reduced from 50 percent of the subsidized rate for American students in 1986 to 20 percent in 1987. Under the previous policy, tuition would have been $4,104 in 1988. Room, board, and fees are the same for all Gallaudet students.

Question: What would be the full cost of a foreign student's education if admitted to NTID?

Answer: The approximate full year's cost of a foreign student's education if admitted to NTID in fiscal year 1988 would be as follows:

Tuition	$14,625
Room	1,400
Board	1,900
Fees	288
TOTAL	18,213

STATUS OF NTID FUND RAISING

Question: Please describe the status of current NTID fund raising efforts. How much does NTID expect to receive from alumni, foundation and corporate contributions in 1987 and 1988?

Answer: The National Technical Institute for the Deaf (NTID) at Rochester Institute of Technology initiated a fund raising program in the fall of 1986 at which time a full-time development professional was appointed. The responsibilities of this position include the formulation and implementation of a fund raising program which addresses both the short-term and long-term development objectives of NTID.

As of April of 1987, the overall direction of NTID's fund raising has been determined and specific activities for the remainder of fiscal year 1987 and fiscal year 1988 have been articulated. While we cannot accurately project at this time what the response will be to our efforts, we will be soliciting funds from alumni, parents, friends, corporations, and foundations and expect to initially raise at least $150,000.

STUDENT CHARACTERISTICS

Question: What percentage of entering freshmen at NTID graduate? What percentage of graduates obtain full-time employment?

Answer: Approximately 55 to 60 percent of all entering freshmen graduate with some certification or degree including certificates, diplomas, Associate degrees, Bachelor's degrees, or Master's degrees. Over 90 percent of those graduating are placed in jobs commensurate with their training.

Question: How many deaf students are pursuing undergraduate studies in regular two and four-year colleges?

Answer: We estimate that there are between 9,000 and 11,000 hearing impaired students enrolled in post-secondary programs in the United States. NTID and Gallaudet University serve over 3,000 and another 4,000 are served by 140 higher education institutions with identified special programs for the deaf listed in College and Career Programs for Deaf Students - 1986. The remaining approximately 2,000 to 4,000 students are in regular two-and four-year institutions without identified programs or with less than 10 deaf students.

Question: What percentage of total per pupil cost does tuition cover at NTID? How does this compare to the average percentage for private four-year colleges?

Answer: Tuition for a deaf student at NTID was $2,385 in fiscal year 1987 which is approximately 15 percent of education related expenditures and 9 percent of total cost per student. Rochester Institute of Technology tuition for hearing students represents approximately 70 percent of the total cost. Tuition represents 37.9 percent of the average total revenue compared to total expenditures for private four-year colleges nationally.

Question: How many students will be on a waiting list in the fall of 1987 at NTID? How much additional funding would be required above the 1988 requested level to eliminate the backlog?

Answer: NTID has estimated that there could be a waiting list of as high as 72 students in school year 1987-88, and that it would need $1 million above the fiscal year 1987 level for operations. This is based on an assumption that at least 400 eligible students will register at NTID. While this is possible, it is contrary to the trend for registrations which fell from 611 in 1983 to 484 in 1984, 426 in 1985, and 379 in 1986. It also assumes a salary increase will again be granted to all staff and that increases for all other programs, including outreach, research, and training will not be effected. All of NTID's other primary indicators are also declining, including enrollment, admissions, and applications for admissions. This is despite substantial increases in their budget which enabled the Institution to admit all eligible students who wished to attend.

GALLAUDET UNIVERSITY

Questions Submitted by the Subcommittee

RUBELLA EPIDEMIC

Question: Why is Gallaudet expecting an increase in the number of rubella students, if the epidemic was in 1964-65 (making most of those afflicted past college age)?

Answer: Gallaudet University projections show that the number of new incoming rubella students is decreasing. However, since it takes the average deaf student 4 to 6 years to complete a degree, the first rubella students to enter Gallaudet are only now preparing to graduate. As a result, the total number of enrolled rubella students has continued to increase. Gallaudet projections show that after fiscal year 1988, the total number of rubella students enrolled at Gallaudet will begin to decrease as well. Two things are important to note: 1) the average deaf student who enters Gallaudet is one to two years older than his hearing counterpart and takes one to two years longer to complete a bachelor's degree; 2) Gallaudet can only estimate the actual number of its students that were deafened as a result of the rubella epidemic of 1964-65.

Question: Why is Gallaudet projecting an enrollment decline in 1988?

Answer: The decline noted in the Congressional justification is based on estimates of the expected decline in rubella epidemic students. The University tries to be conservative in its enrollment projections, and, for several years, has been projecting an enrollment level of 2,100 students. However, the rubella students have not yet completed their educations and actual enrollment levels have exceeded 2,100. In fiscal year 1987, enrollment reached a level of 2,206. The University believes enrollments may decrease somewhat, but will still approach 2,200 in fiscal year 1988.

Question: What percentage of entering freshmen at Gallaudet graduate?

Answer: Currently, the University estimates that about 40 percent of its entering students eventually receive bachelor degrees. Gallaudet offers an opportunity for higher education to a high risk population, and a relatively large proportion of these students leave before graduating. Gallaudet compared its graduation rate to the graduation rate of other colleges and universities contained in a 1983 national study on institutions that admit high risk students and found that its graduation rate was not significantly lower than the average rate of these other institutions. However, the University continues to be concerned with the attrition problem and has instituted programs to improve its retention rates.

Question: What percentage of graduates obtain full-time employment?

Answer: Surveys of Gallaudet alumni have shown that both labor force participation and employment rates are high. For example, a 1984 survey of all Gallaudet alumni who graduated between 1944 and

1981 showed that the unemployment rate among male graduates in the labor force was only 3 percent, while the corresponding rate among female graduates was 5 percent. Placement rates for recent graduates are also high--for 1984-85 graduates (the group most recently surveyed) placement rates in full or part-time employment or continuing education were 95 percent for Bachelors degree recipients and 98 percent for Masters degree recipients.

Question: What programs or activities were reduced in order to finance the four new schools and programs at Gallaudet?

Answer: Many of the functions required by the new programs are being performed by current faculty and staff. In addition, there have been some internal reallocations of resources and cost efficiencies, especially from administrative areas. By realizing these increased efficiencies and through the injection of increased private support, the University has been able to move forward with these vibrant new programs.

HEARING STUDENTS

Question: How many hearing students has Gallaudet admitted? Do they pay the same tuition as other students?

Answer: In the fall of 1986, three hearing students were admitted into Gallaudet's regular Bachelor's degree program. Hearing students were charged the same tuition and received the same Federal subsidy as deaf students. The Department questions whether it is appropriate for the Federal Government to subsidize students who are not hearing impaired or enrolled in a program which specifically trains students to work in deafness related fields. These students should be responsible for the full cost of the University's education related expenditures on their behalf.

TUITION AS A PERCENTAGE OF TOTAL COST

Questions: What percentage of total per pupil cost does tuition cover at Gallaudet? How does this compare to the average percentage for private four-year colleges?

Answer: If the per student cost is calculated according to the method used by GAO in its first audit of Gallaudet, American students attending the University in fiscal year 1987 paid approximately 10 percent of full cost with their tuition and required unit fees. Comparable information for fiscal year 1987 is not yet available for other private four-year colleges. However, in fiscal 1985 (school year 1984-85), tuition and the required unit fee covered approximately seven percent of the total per pupil cost at Gallaudet, and the average percentage was 37.9 for private four-year colleges.

FOREIGN STUDENTS

Question: How many foreign students and how many hearing students are currently enrolled in undergraduate programs at Gallaudet University?

Answer: In the fall of 1986, Gallaudet enrolled 3 hearing students and 186 international students in the regular Bachelor's degree program.

Question: Do you expect enrollments of such students to remain stable or change?

Answer: The University anticipates that the enrollment of international students will remain stable and that the enrollment of hearing students will gradually rise. Gallaudet has set an internal cap on the number of hearing students at eight percent of the total undergraduate enrollment.

MAINSTREAMING ACTIVITIES

Question: What activities are being undertaken at the Model Secondary School for the Deaf and the Kendall Demonstration Elementary School to increase mainstreaming options for deaf children?

Answer: In the past year, the Kendall Demonstration Elementary School (KDES) and the Model Secondary School for the Deaf (MSSD) have increased their emphasis on mainstreaming in two ways. First, both schools have increased the number of students who are placed for part of the day in public or private schools for the nonhandicapped. Seventeen of the 552 students attending KDES and MSSD in school year 1986-87 are currently spending part or all of their day in classes with hearing students. High school students attend the Gonzaga College High School, Duke Ellington School for the Arts, and Phelps Vocational Center. KDES students are integrated into programs at Watkins Elementary School and the Gallaudet Child Development Center.

In addition to the above placements, Gallaudet also brought 12 hearing students to the schools as part of reverse mainstreaming projects. Seven students from Hamilton Junior High School attend beginning sign language classes at MSSD taught by two MSSD students. Three of the students from this class also joined the MSSD Computer Club. Five students from the School Without Walls program enrolled in beginning sign language classes at MSSD, and one of these students became a volunteer at the University Child Development Center.

Next steps in the mainstreaming area include: enrollment of Hamilton Junior High School students in MSSD's Sewing As a Business Course; intern placements at MSSD for Schools Without Walls students; and implementation of placements for KDES students with a Head Start Program and the Brent Elementary School.

On a national level, pre-college programs at the University have established it as a priority for the next two years to significantly increase the services to professionals who work in public school programs. Through a national training network called Education Resource Centers on Deafness, special emphasis in being placed on the training of professionals in the mainstream. In addition, a consortium of up to fifteen public school programs will be established during this fiscal year with two goals in mind. First, the school systems will receive training services. Second, and in return, these systems will conduct product reviews of MSSD and KDES materials to ascertain their value for use in public school programs.

INDIVIDUALIZED EDUCATION PROGRAMS

Question: What changes, if any, have been made in procedures for the development of individualized education programs at

Gallaudet's Model Secondary School for the Deaf and the Kendall Demonstration Elementary School with the enactment of the Education of the Deaf Act? What has been the effect of the requirement that the referring State or local educational agency or intermediate educational unit must be responsible for assuring that the student they refer to these schools have services that are in compliance with Part B of the Education of the Handicapped Act? Has the enactment of the Education of the Deaf Act with such a requirement affected your development of mainstream programs for deaf children?

Answer: There has been no change in the procedures for the development of individualized education programs (IEPs) at KDES and MSSD. Since the inception of the Education of the Handicapped Act in 1978, KDES and MSSD have been developing individualized education programs for each child enrolled in the schools. Local educational agencies (LEAs) who refer students to KDES and MSSD receive prior written notification of the date and time of the IEP meetings and are invited to attend. Once IEPs are completed, copies are routinely sent to the student's LEA for their information and followup. KDES and MSSD have never had formal complaints lodged by parents or LEAs related to the individualized programs provided by the schools. LEAs are only one source of referrals for students admitted to the schools.

A complete review is being conducted of the IEP procedures of both KDES and MSSD this school year. Any modifications which may be necessary following that review will be completed prior to the beginning of the 1987-88 school year as further assurance of compliance with the requirements of the Education of the Handicapped Act.

The development of mainstream programs for deaf students enrolled in KDES and MSSD began in 1985. Some students from KDES and MSSD are now enrolled in schools for the nonhandicapped as part of their IEPs. The Education of the Deaf Act mandated that the schools develop curricula, instructional techniques, materials, and programs for teaching hearing impaired and deaf students in classroom situations with nonhearing impaired students. In accordance with this provision, both schools are giving special emphasis to needs assessments of professionals in public school programs and the development of special instructional and support materials for use with deaf and hearing students in the mainstream.

HEARING STUDENTS

Question: Mr. Lee, we understand that last fall Gallaudet, for the first time, admitted hearing students. Please update us on how this experiment is going.

Answer: Gallaudet has had hearing students in its graduate programs, which were created to train professionals to work with the deaf, since they were created. It has also for many years enrolled hearing students in the associate of arts program in interpreter training. It is therefore not unusual to see hearing students on campus. For the first time, in 1987, Gallaudet enrolled three hearing students in its regular baccalaureate program.

The University is pleased with the new program and thinks it will add a new scope to the University's programs. While these students

are not being specifically trained to work with the deaf, they have expressed an interest in deafness. Gallaudet believes that studies in the unique environment of Gallaudet's campus will help prepare students to work with the deaf. The Department of Education endorses any efforts to integrate disabled and nondisabled persons, but does not believe the Federal Government should be responsible for subsidizing hearing students not specifically enrolled in programs to train professionals to work in deafness related fields.

Question: I know that Gallaudet, by virtue of being an institution specializing in service to the hearing-impaired, is in the center of the debate regarding the merits of "mainstreaming" deaf students, that is, educating them in the same school with hearing students. What does the movement toward mainstreaming imply for the future viability of Gallaudet?

Answer: Gallaudet states and has stated in the past that it is their philosophy that it is in the best interest of deaf students to have a wide range of program options. The university believes that there should continue to be a variety of types of institutions available to deaf students, including both mainstream and special schools and colleges. However, despite a proliferation in recent years of postsecondary programs for the hearing impaired located in "mainstream" colleges and universities, Gallaudet continues to award a majority of the Bachelor's degrees earned by deaf people in the United States.

In response to the national trend toward mainstreaming, Gallaudet has increasingly begun to offer programming that promotes the integration of deaf and hearing students. For example, Gallaudet has started to enroll a modest number of hearing students in its regular undergraduate program. These are students who have a career interest in serving deaf people in a professional capacity. Through its consortium program, Gallaudet also places somes students in courses in local colleges and universities. In addition, Gallaudet has, for many years, enrolled substantial numbers of hearing students in its graduate and associate of arts interpreting programs. Finally, Gallaudet cooperates in many ways with other programs that offer mainstream programs.

Questions Submitted by Senator Daniel K. Inouye

SALARY INCREASES

Question: Dr. Lee, last year you mentioned that Gallaudet faculty salaries lag significantly below those of other comparable institutions. You cited a 1985 GAO report which substantiated this, and a Washington Post survey also confirming that your University ranked next to last salarywise across area institutions. Were you able to narrow this gap at all in the past year?

Answer: The 1985 GAO report found that Gallaudet salaries for all ranks were higher than the median salaries for four-year private and public comprehensive institutions. However, the fringe benefits were considerably lower, resulting in an average for all ranks combined of slightly lower than the median. Since the issuance of that report, Gallaudet has been able to provide additional faculty

pay increases. In 1986, they increased faculty salaries by 8 percent. In 1987, faculty salaries were again increased by over 5 percent.

Question: It seems to me your faculty has an even more strenuous task than those in other universities. If I understand correctly, your faculty must be knowledgeable about deafness and also must teach in sign language. Doesn't this mean that it's ever more important for Gallaudet faculty salaries to be competitive since your professors must have or acquire special skills to teach a unique population?

Answer: It is important that the University's faculty salaries be competitive. The University's faculty, like all other faculty, are responsible for teaching, developing new research, and providing service to others in the field of deafness. However, they are doing so within the context of a unique setting. Many of our faculty are teaching at Gallaudet because they prefer the environment of service and have a commitment to serving the deaf. Gallaudet, as one of the country's premier institutions serving the deaf, has a great draw for professionals in the field and many others interested in the special problems of deafness. For some fields, in which faculty are not available who have a special interest in deafness, the University hires competent personnel in that discipline and provides the additional skills necessary to communicate effectively.

Question: Obviously, the fiscal year 1988 budget reflects no available funds which might be applied toward alleviating this situation. In order for Gallaudet's compensation program to remain competitive, how much would you need to bring your University to the mid-point of local higher education institutions?

Answer: Within the University's total budget, including federally appropriated funds, it has the discretion to allocate funds to its highest priorities, be they new programs or pay increases. In building the budget request for 1988, funds were included for a 4.8 percent increase in salaries. The University estimates that $660,000 would be necessary to reach the midpoint of salaries at area institutions. The steps that Gallaudet is taking steps to increase nonFederal revenues will help it to achieve that goal.

SCHOOL OF MANAGEMENT

Question: Dr. Lee, in the statement you submitted to the Subcommittee, you mentioned the establishment of a School of Management. Could you explain this program a bit? What are its objectives?

Answer: Officially, it will start in the fall of 1987. We will be offering the following eight new majors: Business Administration, Business Management, Public Administration, Entrepreneurial Studies, Personnel and Industrial Relations, Business Economics, Insurance and Risk Management and Finance. We will also be starting an Institute for Management Studies, which is a program designed for deaf business professionals.

The School of Management is designed to provide management and administrative training for its undergraduates and to serve the many

deaf professionals who seek continuing professional development. More specific objectives are to:

-- Prepare students for positions of responsible leadership and stewardship in an environment of growth and change.

-- Provide students with a comprehensive set of programs in Management and related fields, particularly as it relates to operating a small business.

-- Prepare tomorrow's managers who will assume positions of managerial responsibility in a variety of settings in both the public and private sectors.

-- Design and implement models for management seminars in conjunction with other area universities and colleges to serve the needs of disabled individuals.

-- Provide a forum where appropriate private and public sector individuals can share their knowledge and expertise with deaf individuals.

-- Provide experienced deaf professionals with a better understanding of both the practical tools for solving current problems and innovative approaches for planning the future.

-- Directly involve business, industry, and government experts in the educational process of hearing-impaired students.

-- Provide students with management and technical skills needed for planning and operating business and service organizations.

-- Prepare students for graduate studies in business, public administration and related fields.

Question: There seems to be no money in the fiscal year 1988 budget to support this new program. What will this mean in terms of its continued growth and viability?

Answer: Gallaudet did not seek approval for an added appropriation to fund this new school. The 1986 and 1987 increases in the appropriation gave the University the flexibility to create new initiative without seeking additional funds. Gallaudet reallocated funds to start the program, and private funding will be used to purchase a part of the initial technology. Increased tuition revenues will also help support this activity.

Many current studies including the College Placement Council (1986) and Changing Times (1987) have indicated that demand for management graduates will be strong. Gallaudet therefore believes that the job market will be positive for graduates from the program.

REGIONAL CENTERS

Question: I understand that Gallaudet is expanding services through a regional center concept, and that you may be able to reach some 40,000 persons using these centers as regional hubs. What is

the status of this program and how many people do you expect to reach next year?

Answer: Gallaudet has expanded its regional center structure to a total five centers, not including the main campus. In the spring of 1986 two new centers were opened: Flagler College in St. Augustine, Florida and Eastfield College in Mesquite, Texas. These two centers became fully operational in fiscal year 1987. In addition, the main Gallaudet campus serves as a regional center for the States which are not currently served by a regional center. The centers are listed below:

° Ohlone College
College for Continuing Education
Washington, D. C.

° Johnson County Community College
Gallaudet University Regional Center
Overland Park, Kansas

° Northern Essex Community College
Gallaudet University Regional Center
Haverhill, Massachusetts

° Gallaudet University
Gallaudet University Regional Center
Fremont, California

° Flagler College
Gallaudet University Regional Center
St. Augustine, Florida

° Eastfield College
Gallaudet University Regional Center
Mesquite, Texas

Gallaudet estimates that approximately 45,000 persons will be served in fiscal year 1988 through the regional centers and the main campus.

ENDOWMENT

Question: As mandated by last year's Education of the Deaf Act, the President's budget proposes a $1 million payment to your endowment fund. How will this affect your current drive to expand your endowment, which last year you told us was worth $4.2 million?

Answer: The impact of this new payment would be to provide funding in the form of a matching grant that will encourage contributors to donate money to Gallaudet. Gallaudet believes that there is a clear additional incentive under this matching grant program in that it will enable the University to double any amount it receives up to a $1,000,000.

RESEARCH BUDGET

Question: You have not requested any increases in your research budget. Without additional funding can you still have the same impact?

Answer: Gallaudet is maintaining its leadership role in the area of research. While the University has not specifically requested additional direct funding for research from the Federal Government, Gallaudet has allocated increases to this activity from increases it has received in the appropriation. For example, between 1986 and 1987, Gallaudet increased the research it funds directly from the appropriation from approximately $2,250,000 to $2,650,000, an increase of over 18 percent. Another way in which the University

has been able to expand its research efforts has been to seek out more Federal and private grants. This has been quite successful.

Participating organizations include the American Telephone and Telegraph Company, American Association for Retired Persons, and the National Science Foundation. During the last several years, these organizations have provided large grant awards to the university.

Question: Can you give me some examples in which research projects and services conducted by Gallaudet University have had a positive impact on hearing impaired individuals?

Answer: There has been many impacts. Our Center on Assessment and Demographic Studies (CADS) has the largest on-going database about deaf students in this country. It regularly serves the field in understanding and developing the special requirements of this population. CADS is also responsible for developing and norming the SAT-HI, the test taken by deaf students nationwide. In addition to Gallaudet's traditional focus on accommodation research, the University has also branched more and more into the areas of prevention and restorative research. Programs and studies which have had an impact include the following:

-- Technology Assessment Program.

-- Studies in math effectiveness in mainstream programs.

-- Reading methods studies.

-- Genetics research.

-- Mental health research.

-- Parent/infant research.

Question: Who are the individuals or groups that benefit from Gallaudet's research efforts?

Answer: A variety of constituencies have benefited over the years:

-- Teachers of the hearing-impaired.

-- Administrators of programs serving the deaf.

-- Social service providers such as mental health counselors, psychologists, doctors.

-- Other researchers.

-- Manufacturers of products serving the hearing-impaired.

NEW DEGREE PROGRAMS

Question: I understand that the University has, without any new funds, responded to its new responsibilities as a University by establishing two new degree programs. Please describe the programs and explain how they are operated.

Answer: Between 1985 and 1987, Gallaudet received an appropriations increase of $3.3 million dollars. During this period, the university created and established the two new degree programs. These are the Masters in Mental Health Counseling and Masters in Parent/Infant Education. The programs will prepare graduates to work in the vital, but underserved areas of mental health for the deaf population and early intervention to improve the educational prospects of deaf children. The University also established a School of Management and expanded the gerontology program during this period. The university is moving toward the early childhood and senior citizen populations with greater emphasis, and these programs will greatly increase the trained professionals in these fields.

Question Submitted by Senator Lowell P. Weicker, Jr.

RUBELLA BULGE

Question: In the budget justification for Gallaudet, you state that "The percentage of students whose deafness is attributed to the rubella epidemic of 1964-65 is expected to increase." Yet the budget proposal for NTID indicates that the number of deaf students from the rubella epidemic is decreasing. How do you reconcile this apparent contradiction?

Answer: Gallaudet University projections show a decline in the number of new students coming to Gallaudet, similar to the trend observed at NTID. However, the majority of Gallaudet's students are enrolled in Bacculaureate programs which take between four and six years for the average deaf student to complete, whereas most of the students at NTID are enrolled in certificate, diploma, and associate degree programs which do not take as long. For this reason, students entering NTID during the height of the rubella bulge have already begun to graduate from NTID, whereas students who enrolled at Gallaudet during this same period are still enrolled.

HOWARD UNIVERSITY

Questions Submitted by the Subcommittee

NUMBER ONE FUNDING PRIORITY FOR FY 1988

Question: What would you identify as your number one funding priority if the Howard appropriation were increased?

Answer: The highest funding priorities if the appropriation were increased are: (1) increases for faculty salaries and (2) funding for physical facilities including the renovation of existing facilities and the construction of new facilities.

HOWARD UNIVERSITY SELECTED STATISTICS

Question: Please compare the following statistics for Howard University to the average for private four-year colleges: annual tuition; percentage of students receiving financial aid; alumni contributions as a percentage of total operating budget; percentage of living alumni who made contributions during 1986; percentage of operating expenses derived from tuition; percentage of entering freshmen who matriculate four years later; percentage of students who pursue graduate study; average faculty salary; student-teacher ratio; and default rate on student loans.

Answer: The University is providing the data requested for Howard University. We cannot provide the data for an average private four-year college because such data are not available to us. The University has historically used a selective 11-school study for comparative purposes utilizing only educational institutions that are comparable with Howard in terms of scope, complexity and similar academic offerings. The latest financial data available from this study are for 1983-84, but unfortunately almost none of the statistics requested are included in the study. The data for Howard University are as follows:

	1986-87	1987-88
1. Annual tuition:		
Graduate School	$4,600	$4,600
College of Law	5,300	5,300
College of Medicine	6,350	7,000
College of Dentistry	5,100	5,600
All other schools and colleges	3,500	3,900
2. Percentage of students receiving financial aid	82%	
3. Alumni contributions as a percentage of total operating budget	0.51%	
4. Percentage of living alumni who made contributions during 1986	9%	
5. Percentage of operating expenses derived from tuition and fees	18.1%	

6. Percentage of entering freshmen who matriculate four years later 42%

7. Percentage of students who pursue graduate study 40%

8. Average faculty salary (1985-86):

	Howard
Professor	$42,600
Associate Professor	32,000
Assistant Professor	26,400
Instructor	21,800

9. Teacher-Student Ratio:

	Ratio
School of Architecture	1:10.61
School of Business and Public Administration	1:33.43
School of Communications	1:13.62
School of Divinity	1:11.33
School of Education	1:04.96
School of Engineering	1:15.87
College of Fine Arts	1:04.13
Graduate School	1:08.33
School of Human Ecology	1:15.16
School of Law	1:11.56
College of Liberal Arts	1:12.77
School of Social Work	1:06.15
College of Allied Health Sciences	1:12.00
College of Denistry	1:3.26
College of Medicine	1:1.11
School of Nursing	1:8.13
College of Pharmacy and Pharmacal Sciences	1:8.13

10. Default rate on student loans as of December 31, 1986:

	Percentage
National Direct Student Loans	9.05
Health Professions Loan-Medicine	4.60
Health Professions Loan-Dentistry	4.71
Health Professions Nursing (Diploma)	27.55
Health Professions Nursing (Baccalaureate)	9.64
Health Professions Nursing (Graduate)	30.30
Health Professions Pharmacy	1.69

The Department of Education has compared the following statistics from the Higher Education General Information Survey for Howard University to the average for all private universities:

	Howard	All Private Universities
1. Annual Tuition in 1986-87	$3,500	$8,060
2. Percentage of general education revenue derived from tuition and fees	14.9%	41.7%
3. Average faculty salary (1985-86):		
Professor	$42,600	$51,355
Associate Professor	32,000	35,307
Assistant Professor	26,400	29,125
Instructor	21,800	22,743

FISCAL POLICY TASK FORCE RECOMMENDATIONS

Question: Please provide a summary of the recommendations of the task force studying ways to reduce expenditures.

Answer: The Fiscal Policy Task Force report recommendations to the President have not yet been implemented because the report was received in early April 1987. A summary of the recommendations from the report are as follows:

A. The Howard University Foundation

The Task Force recommends that the entire budget of the Howard University Foundation be abolished (beginning with the 1988 fiscal year) but the Howard University Foundation be retained as a legal entity. This recommendation is not intended to mean that the University should not pick up and carry on Howard University Foundation activities or projects.

B. The Howard Inn

The Task Force recommends that a study be conducted to determine the future fiscal feasibility of operating The Howard Inn as a commercial hotel. If the study determines that The Howard Inn operation is not financially feasible, the Task Force recommends that the Howard Inn facility be converted into other uses such as a conference center, dormitory, office building etc. (A future use of the facility should be included as a part of the study). The Task Force does not recommend that The Howard Inn be sold because the structure and the land are an integral part of the Howard campus and are considered important for future expansion requirements.

C. The Howard University Press

The Task Force recommends that it be the University's objective to make the Howard University Press self-supporting not later than 1992. Further, that a plan to accomplish this objective be developed by the management of the Press and submitted for approval by the President. During this five-year period, the Press should be given a fixed subsidy of $435,000 per fiscal year by the University. In addition, all revenue generated by the

Press should be returned to the Press for its use as a production budget.

D. Office of the University Senate

The Task Force recommends that the budget of the University Senate be reduced to $30,000 annually and that support services for this activity be provided from the Office of the President effective July 1, 1987.

E. The School of Continuing Education

It is recommended that the President not approve any offerings of the School of Continuing Education except the Summer School Program until such time that the President has received and approved both an implementation plan and a budget.

F. University Equipment Purchases and/or Leasing Policy

The Task Force recommends the following changes in current equipment fiscal policy:

1. The restoration of equipment line items in the budget effective July 1, 1987.

2. Within the context of the 1988 budget call, individual departments should develop an equipment line item. The source of funds to support the equipment acquisitions shall be identified from within existing budgets.

3. Approved authority for the expenditure of unrestricted funds for equipment purchases and/or leases shall rest with the members of the Administrative Cabinet. In addition, approval for the purchase of computers and related equipment shall require assessment and approval by the Executive Director of the Office of University Computing Services or his designee.

G. The Current University Retirement Program

That the cost of the University's retirement program be reviewed in light of applicable legal constraints and that recommendations be presented to reduce such costs.

H. University Sponsored Construction Projects

That all University sponsored construction projects not presently underway be delayed indefinitely except those projects intended to alleviate accreditation deficiencies or to meet safety needs.

I. University Telecommunications

That a cost effective integrated telecommunications system be implemented and installed University-wide as soon as possible and that the University develop policies and standards governing the usage of telecommunications equipment and services. That each University unit be provided usage reports on a regular basis for monitoring and audit purposes.

J. University Travel Expenditures

It is recommended that the stated requirement on the Travel Authorization forms should be strictly enforced permitting the University to deduct from salary checks, travel advances to employees who have failed to submit settlement papers in a timely fashion.

The approval of foreign travel should be treated the same as domestic travel. The President should no longer approve foreign travel.

K. Vacant University Positions

The Task Force recommends a continued freeze on specific vacant University positions totalling $950,354 through the end of the current fiscal year. In addition, the Task Force recommends that positions abolished on September 8, 1986, totalling $2,756,575 (including fringe benefits) not be restored in the 1987-88 University budget.

L. Board of Trustees

The Task Force further recommends that the President engage the Members of the Executive Committee of the Board of Trustees, in conjunction with other appropriate Committees of the Board, in serious discussions related to Trustee responsibilities associated with revenue enhancement.

M. The Athletic Program

The Task Force recommends that a comprehensive marketing and fund-raising program be prepared in support of University athletics as soon as possible.

N. Student Deferred Payment Plan

The Task Force is aware of the President's appointment of the Special Committee for Delinquent Student Accounts and of related problems due primarily to the current deferred payment plan. We, therefore, in addition to specific recommendations from this committee either made or forthcoming to the President propose the following:

1. That beginning with the Fall Semester 1988, and thereafter, dormitory or housing charges no longer be included as an eligible item for deferred payment.

2. That only tuition and fees be included in the deferred payment plan except for the Student Health Fee that was specifically excluded by the Board of Trustees in January 1987.

3. That payments under the deferred payment plan be revised as follows:

   - A minimum of 50 percent down payment is due and payable either prior to registration for early registration participation or at the time of registration for those

students who do not participate in early registration. (NO EXCEPTIONS TO BE MADE.)

- The remaining 50 percent of tuition and fees will be payable in a single payment at a date during the semester to be established. In addition, it is further recommended that if a student fails to meet his/her deferred payment obligations in full at the end of a 10-day grace period, he/she shall be denied:

  (1) Participation in early registration;
  (2) Participation in the deferred payment plan in the future for the remainder of his/her matriculation at Howard University;
  (3) Credits/grades for the courses being taken;
  (4) transcripts;
  (5) retroactive registration;
  (6) eligibility to attend classes or to take examinations; and
  (7) a validated registration certificate.

In addition, a financially delinquent student shall be suspended from enrollment at the University until such time as he/she pays in full the amount owed to the University.

Prior to actual suspension, a detailed notice (billing) shall be sent to the student and the student shall have the opportunity to present written evidence of payment within a reasonable period of time. In addition, a listing of students suspended shall be provided to the Administrators and Deans concerned.

O. The Non-Faculty Classification System

The Task Force recommends that the University's compensation and position classification system for non-faculty employees be reviewed and evaluated by an outside consulting firm with the objective of developing and implementing a revised and more effective system by July 1, 1987, or as soon thereafter as practical.

P. University Chapel

It is recommended that the "Little Chapel" in Carnegie and the Randolph Chapel be eliminated. That the University not maintain office space for non-University personnel and that the Office of the Dean of the Chapel be relocated to Rankin Chapel.

Q. Physical Facilities Management Department

We recommend that external consultants be engaged to review the entire Physical Facilities Management Department operation with the goal of increasing efficiency and reducing expenditures of the Department's budget. This study should be implemented as soon as practicable.

R. Coordination of the University Planning Process with the Preparation of the University Budget

The Task Force recommends that the preparation of the University budget become an integral part of the University planning process. That the functions of the Office of Planning, Operations Analysis and Institutional Research become a part of the budget process and that these functions be consolidated in the Office of the President. It is further recommended that if the functions of the Office of Planning, Operations Analysis and Institutional Research are not tied to the budget process, then these offices should be abolished.

S. Tuition and Fee Charges

The Task Force recommends that the University Administration examine the practicality of long-range projections and/or ranges of proposals of tuition, fees and other charges with a possible view to multiple year scheduling including, among other things, the timing of possible future increases.

OPERATING COSTS COVERED BY FEDERAL FUNDING

Question: What percentage of total operating costs are covered by Federal funding (from all program sources, not only the Education appropriation)? Please identify these sources by program and distinguish between funds for the academic program, research, and the University Hospital.

Answer: The following is a schedule of Howard University and Howard University Hospital estimated operating costs by Federal and non-Federal sources for July 1, 1986, through June 30, 1987:

	Amount	Percentage
Federal Sources:		
Howard University		
Academic Appropriation	$139,571,000	
Research Appropriation	9,752,000	
Grants and Contracts-- Unrestricted	4,030,000	
Restricted Research Grants/ Contracts	15,493,000	
Student Aid	4,221,000	
Construction Appropriation	1,547,000	
Endowment Appropriation	2,000,000	
Total Federal Sources University	176,614,000	

Howard University Hospital		
Federal Appropriation	22,106,000	
Medicare Program	41,968,000	
Medicade Program	21,515,000	
Total Federal Sources Hospital	85,589,000	
Total University and Hospital Federal Sources	262,203,000	68.6%
Non-Federal Sources		
Howard University		
Unrestricted	66,294,000	
Restricted	9,975,000	
Total Non-Federal Sources	76,269,000	
Howard University Hospital		
Unrestricted	43,672,000	
Total University and Hospital Non-Federal Sources	119,941,000	31.4%
Total Federal and Non-Federal Sources	382,144,000	100%

LEVEL FUNDING IMPACT ON ENROLLMENT AND FACULTY POSITIONS

Question: The Administration's fiscal year 1988 budget request for Howard University is the same as the fiscal year 1987 appropriated level, $170,230,000. Do you anticipate that enrollment will remain the same with the current number of faculty positions maintained?

Answer: If the Administration's budget request for Howard University is approved and the University has level funding for fiscal year 1988, and other factors influencing enrollment are stable, we are likely to maintain enrollment at either the same or reduced levels. Howard University is currently below the average faculty salaries for comprehensive institutions as compared with studies released by the AAUP and we must provide some increases in salary for our faculty. Therefore, if funding from the Federal appropriation is the same as fiscal year 1987, I project that the current number of faculty will decline with a possible reduction in enrollment because of the inability to fill vacant faculty positions.

CURRENT TUITION AND PERCENTAGE OF TOTAL COST

Question: What is your tuition now and what portion does it represent of the total costs to the institution of educating a student in a regular academic program?

Answer: The tuition for the undergraduate academic schools and colleges is $3,500 for the 1986-87 school year, and it covers approximately 27 percent of the total cost to the institution of

educating a student in the regular academic program. The tuition for the undergraduate schools and colleges will be $3,900 for the 1987-88 academic year beginning in the fall of 1987.

STUDENT FINANCIAL AID PROGRAMS

Question: How many of your students use Pell Grants?

Answer: In 1985-86, 2,332 students received Pell Grants.

Question: What is the average income of your students?

Answer: The median family income level of entering freshman, in the fall of 1985, was $26,500.

Question: To what extent do you participate in the other campus-based Federal student aid programs--Perkins Loans, College Work-Study, Supplemental Educational Opportunity Grants?

Answer: About 59 percent of our students receive assistance from Federal student aid programs such as Perkins Loans, Pell Grants, College Work-Study and Supplemental Educational Opportunity Grants.

Question: What portion of your students use loans to help finance their education?

Answer: We estimate that 48 percent of our students use loans to finance their education.

Question: What is the default rate for Perkins Loans and Guaranteed Student Loans on your campus?

Answer: The default rate for Perkins Loans in 1985-86 was 16.35 percent. The Office of Financial Aid is unable to determine the default rate for Guaranteed Student Loans as these statistics are maintained by the lenders and guarantors.

PERCENTAGE OF FEDERAL APPROPRIATION TO TOTAL BUDGET

Question: Your justifications indicate that the Federal appropriation represents 60 percent of your academic program's operating budget. Are you anticipating that this percentage will remain the same?

Answer: The University is hopeful that the percentage of Federal support for our budget will remain at approximately 60 percent of the total academic budget.

Question: If the percentage fell below that level, what kind of alternative financing plan do you have?

Answer: The alternative financing plan, if Federal support is reduced, must include increases in tuition and fees. Additional financing will include restricted and unrestricted contracts and grants, a greater emphasis on gifts, increased rents, increased revenue from auxiliary enterprise operations, and a general review of all current and proposed revenue sources.

Question: In terms of alternative financing sources, would an increase in tuition be a serious consideration?

Answer: Additional financing as needed will include additional increases in tuition and fees.

FACULTY SALARY PROPORTION OF ACADEMIC APPROPRIATION

Question: What proportion of the funding for academic programs is for faculty salaries?

Answer: The academic program component of the Howard University budget for fiscal year 1987 is $141,124,000. The total expenditure for faculty salaries is approximately $65,089,657, or 46 percent of the funding for the Federal academic program account.

THE HOWARD INN OPERATION

Question: There was some concern a few years back about the operation and maintenance of the Howard Inn. Has that been resolved?

Answer: The Howard Inn operation has improved significantly since its initial operation several years ago. The Inn is fairly close to a breakeven operation, and we are hopeful that next fiscal year it may show a small profit. The significant aspect of the Howard Inn is the fact that it is the training facility for our program in Hotel-Motel Management. To date, we have approximately 200 students enrolled in the program.

Question: Were Federal funds used to support the Howard Inn?

Answer: The Howard Inn was not financed in whole or in part from Federal sources of any type and no Federal funds have been used to support the operation of The Howard Inn.

ENDOWMENT FUND

Question: Why is it indicated in your fiscal year 1988 budget documents that the request for endowment funds is still pending submission of proposed legislation?

Answer: The Howard University Endowment Act (Public Law 98-480) authorizes a total appropriation of $2,000,000. This appropriation authority was used in fiscal year 1987. The Department seeks to extend the authority to appropriate $2,000,000 for the Howard University endowment for each year through fiscal year 1992.

Question: How will the proposed legislation affect the current endowment program?

Answer: The Department's proposed legislation would extend the authority to appropriate funds without changing any other statutory provisions in the Howard University Endowment Act.

Question: To what extent has the current endowment been matched with corporate contributions?

Answer: Corporate contributions account for 17 percent of the $2.8 million that has been raised by Howard University.

Question: What is the major source of financial contributions to the Endowment program?

Answer: The following are the major sources of financial contributions to the Endowment program: Alumni (36 percent), corporations (17 percent), foundations (20 percent), friends (18 percent), and international sources (9 percent).

FEDERAL RESEARCH ACTIVITIES

Question: The fiscal year 1988 budget documents imply that Federal funding of research activities at Howard University is a relatively new activity. Prior to 1985, what kind of research support was there?

Answer: The direct appropriation to support research is a relatively new activity but prior to 1985 research support was obtained by way of grants (public and private), principally from Federal agencies with some grants being received from local municipalities. The University received some grants from the private sector entities such as from for-profit corporations and foundations.

HOWARD UNIVERSITY HOSPITAL LEVEL FUNDING

Question: The fiscal year 1988 budget documents indicate that Howard University Hospital has been level funded since 1976 and the fiscal year 1988 request would continue this trend. Are you anticipating any growth in the number of daily patients? Are you still maintaining the same number of staff for emergency care?

Answer: Our projections for fiscal year 1988 indicate no anticipated growth in the Hospital's daily census. We expect that staffing patterns in the Hospital emergency care area and elsewhere will be unchanged for fiscal year 1988.

Question: The percentage of the total operating costs represented by Department of Education funds appears to be decreasing from 17 percent in 1986 to 13 percent in 1988. What other sources of financial support are being used?

Answer: Howard has consistently been one of the leaders in upholding a mission of never refusing quality healthcare to a patient because of his or her inability to pay for the care rendered. During 1988, it is projected that Howard will finance 87-88 percent of its operations from insured and private paying patients. Of the 88 percent financed from our operations (e.g. resources from insured and private paying patients) 58 percent will come from Medicare and/or Medicaid subscribers, 30 percent from commercial insurance subscribers and 12 percent from uninsured patients.

HOSPITAL EVALUATIONS

Question: Have there been any evaluations of your hospital in terms of patient care and emergency medical services to show how you rank with other hospitals in the D.C., Maryland, and Virginia area?

Answer: There have been no official evaluations (i.e., by a generally accepted authority) of the Hospital in terms of a ranking with other hospitals in the D.C., Maryland, and Virginia areas. The

Joint Commission on Accreditation of Hospitals (JCAH), which is the nationally recognized body that evaluates hospitals in terms of standards dealing with the quality of patient care, conducted a site visit of the Howard University Hospital in the fall of 1986 for the purpose of evaluation. The Hospital received a full three-year accreditation by the JCAH as a result of its study.

Question Submitted by Senator Lowell P. Weicker, Jr.

HOWARD UNIVERSITY HOSPITAL

Question: Last year, Howard indicated to this subcommittee that one of its very top priorities was Federal support for the Howard University Hospital which has been level funded since 1976. This committee recommended a $5 million increase. Apparently, the House was not made aware of the priority you placed on the Hospital funding and in conference indicated that your interest for increases was in other areas relating to salaries and other program costs of the University.

Would you provide both the House and Senate committees with a consistent priority list of needs for Howard University in the coming year, including the Hospital?

Answer: The following is a listing of funding priorities for fiscal year 1988:

I.	Academic Program	
A.	Faculty salary increases (10 percent)	$5,800,000
B.	Non-faculty salary increases (3 percent)	2,500,000
C.	Retirement program	1,000,000
D.	University Libraries (Founders, Undergraduate, Health Sciences, and Law)	1,500,000
E.	College of Medicine	2,600,000
F.	School of Engineering	1,500,000
G.	School of Business and Public Administration	1,950,000
H.	School of Communications	1,500,000
I.	School of Law	1,500,000
J.	College of Denistry	1,500,000
K.	Computer Improvement Program	3,000,000
	Total academic program increases	24,350,000
II.	Construction (physical facilities)	
A.	Comprehensive Sciences Center and Health Sciences Libraries (final plans and specifications)	$2,625,000
B.	University Computer Center (final plans and specifications)	245,000
C.	School of Law (final plans and specifications)	700,000

D.	Dormitory Quadrangle for Freshmen Women Students (Partial funding for construction in FY 1988)	2,000,000
E.	Renovation to Existing Buildings (D.C. Code Violations, Energy Conservation, removal of architectural barriers)	22,000,000
	Total construction funds (The total amount requested will not be expended in FY 1988)	$27,570,000

SUMMARY

I.	Academic program	$24,350,000
II.	Construction (Physical Facilities)	27,570,000
III.	Howard University Hospital	5,000,000
	Total appropriation increases	56,920,000

The Department of Education notes that many of these items could be funded within the request level by re-ordering priorities, transferring resources from other areas, and increasing non-Federal resources. The District of Columbia has also recently granted authority for Howard University to issue $112 million in tax-exempt industrial revenue bonds for construction.

Question: Where is the Hospital increase on that list?

Answer: The Howard University Hospital request is the number three priority on our list for fiscal year 1988.

SUBCOMMITTEE RECESS

Senator CHILES. This will conclude the subcommittee's hearings for the administration witnesses in the fiscal year 1988 budget request for the Departments of Labor, Health and Human Services, and Education.

We will reconvene on Monday at 9 a.m. in room 192 in the Dirksen Building on May 4, for the first of eight public witness hearings. Thank you.

[Whereupon, at 5:20 p.m., Thursday, April 23, the subcommittee was recessed, to reconvene at 9 a.m., Monday, May 4.]

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